HCD-VX90AV

SERVICE MANUAL

E Model

HCD-VX90AV is the tuner, deck, CD and amplifier section in MHC-VX90AV.

This stereo system is equipped with the Dolby B-type noise reduction system*.
* Manufactured under license from Dolby Laboratories Licensing Corporation.
DOLBY and the double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.

CD SECTION	Model Name Using Similar Mechanism	HCD-GRX80/RXD8/RXD8S
	CD Mechanism Type	CDM38L-5BD34L
	Base Unit Type	BU-5BD34L
	Optical Pick-up Type	KSS-213D/Q-NP
TAPE DECK SECTION	Model Name Using Similar Mechanism	HCD-GRX80/RXD8/RXD8S
	Tape Transport Mechanism Type	TCM-230AWR2/230PWR2

SPECIFICATIONS

Amplifier section

The following measured at AC 120/220/240 V, 50/60 Hz

Front Speaker:
DIN power output (rated) 95 + 95 watts (8 ohms at 1 kHz, DIN)
Continuous RMS power output (reference) 120 + 120 watts (8 ohms at 1 kHz, 10% THD)

Center Speaker:
DIN power output (rated) 30 watts (8 ohms at 1 kHz, DIN)
Continuous RMS power output (reference) 35 watts (8 ohms at 1 kHz, 10% THD)

Rear Speaker:
DIN power output (rated) 30 + 30 watts (8 ohms at 1 kHz, DIN)
Continuous RMS power output (reference) 35 + 35 watts (8 ohms at 1 kHz, 10% THD)

Inputs
MD IN: (phono jacks) voltage 450 mV, impedance 47 kilohms
VIDEO (AUDIO) IN: (phono jacks) voltage 250 mV, impedance 47 kilohms
DVD INPUT:
FRONT IN: (phono jacks) voltage 450 mV, impedance 47 kilohms
REAR IN: (phono jacks) voltage 450 mV, impedance 47 kilohms
CENTER IN: (phono jacks) voltage 450 mV, impedance 47 kilohms
WOOFER IN: (phono jacks) voltage 450 mV, impedance 47 kilohms
MIC 1/2 (phone jack): sensitivity 1 mV, impedance 10 kilohms

Outputs
MD OUT (phono jacks): voltage 250 mV impedance 1 kilohms
VIDEO OUT (phono jack): max. output level 1Vp-p, unbalanced, Sync negative, load impedance 75 ohms
S-VIDEO OUT (4-pin/mini-DIN jack): Y: 1Vp-p, unbalanced, Sync negative, C: 0.286Vp-p, load impedance 75 ohms
PHONES (stereo phone jack): accepts headphones of 8 ohms or more
FRONT SPEAKER: accepts impedance of 8 to 16 ohms
REAR SURROUND SPEAKER: accepts impedance of 8 to 16 ohms
CENTER SURROUND SPEAKER: accepts impedance of 8 to 16 ohms
SUPER WOOFER: Voltage 1 V, impedance 1 kilohms

VIDEO CD/CD player section

System	Compact disc and digital audio and video system
Laser	Semiconductor laser (λ=780nm) Emission duration: continuous
Laser output	Max. 44.6 μW* *This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Wavelength	780 – 790 nm
Frequency response	2 Hz – 20 kHz (±0.5 dB)
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 90 dB
Video color system format	NTSC, PAL

CD OPTICAL DIGITAL OUT
(Square optical connector jack, rear panel)
Wavelength 660 nm
Output Level –18 dBm

— Continued on next page —

MICROFILM

COMPACT DISC DECK RECEIVER

SONY®

Tape player section

Recording system	4-track 2-channel stereo
Frequency response (DOLBY NR OFF)	40 – 13,000 Hz (±3 dB), using Sony TYPE I cassette 40 – 14,000 Hz (±3 dB), using Sony TYPE II cassette

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	87.5 – 108.0 MHz
Antenna	FM lead antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
2 Band type:	531 – 1,602 kHz (with the interval set at 9 kHz) 530 – 1,710 kHz (with the interval set at 10 kHz)
3 Band type:	
Middle Eastern models:	
MW:	531 – 1,602 kHz (with the interval set at 9 kHz)
SW:	5.95 – 17.90 MHz (with the interval set at 5 kHz)
Other models:	
MW:	531 – 1,602 kHz (with the interval set at 9 kHz) 530 – 1,710 kHz (with the interval set at 10 kHz)
SW:	5.95 – 17.90 MHz (with the interval set at 5 kHz)
Antenna	AM loop antenna
Antenna terminals	External antenna terminal
Intermediate frequency	450 kHz

General

Power requirements	
Thai and Chinese models:	220 V AC, 50/60 Hz
Other models:	120 V, 220 V or 230 - 240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption:	240 watts
Dimensions (w/h/d)	Approx. 280 x 340 x 395 mm ($13^1/_8$ x $13^1/_2$ x $15^5/_8$ in.)
Mass:	Approx. 12.4 kg
Supplied accessories:	AM loop antenna (1) Remote commander (1) Batteries (2) FM lead antenna (1) Speaker cords (5) Video cable (1) Front speaker pads (8) Center speaker pads (4)

Design and specifications are subject to change without notice.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

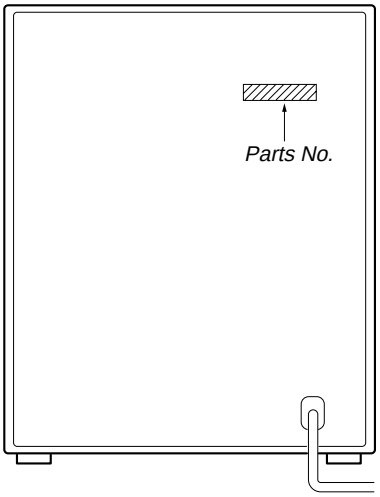
CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

MODEL IDENTIFICATION — BACK PANEL —



PARTS No.	MODEL
4-215-642-1☐	EA, MY, SP model
4-215-642-3☐	IA model
4-215-642-4☐	E model
4-215-642-5☐	TH model

- Abbreviation
  SP : Singapore model
  MY : Malaysia model
  IA : Indonesia model
  TH : Thai model
  EA : Saudi arabia model

TABLE OF CONTENTS

1. SERVICING NOTE 4

2. GENERAL 7

3. DISASSEMBLY
3-1. Loading Panel 9
3-2. Front Panel 9
3-3. Cassette Lid and Tape Mechanism 10
3-4. CD SW Board and Panel Board 10
3-5. Disc Tray 11

4. TEST MODE 12

5. MECHANICAL ADJUSTMENTS 13

6. ELECTRICAL ADJUSTMENTS 13

7. DIAGRAMS
7-1. Circuit Boards Location 18
7-2. Block Diagrams
- CD Section 19
- Video Section 21
- Deck Section 23
- Main Section 25
- Power Section 27
- Display Section 29

7-3. Printed Wiring Board – BD Section – 33
7-4. Schematic Diagram – BD Section – 35
7-5. Schematic Diagram – Deck Section – 37
7-6. Printed Wiring Board – Deck Section – 39
7-7. Printed Wiring Board – Video Section – 41
7-8. Schematic Diagram – Video (1/3) Section – 43
7-9. Schematic Diagram – Video (2/3) Section – 45
7-10. Schematic Diagram – Video (3/3) Section – 47
7-11. Printed Wiring Board – Main Section – 49
7-12. Schematic Diagram – Main (1/4) Section – 51
7-13. Schematic Diagram – Main (2/4) Section – 53
7-14. Schematic Diagram – Main (3/4) Section – 55
7-15. Schematic Diagram – Main (4/4) Section – 57
7-16. Printed Wiring Board – Leaf SW Section – 59
7-17. Schematic Diagram – Leaf SW Section – 59
7-18. Printed Wiring Board – Panel Section – 61
7-19. Schematic Diagram – Panel (1/2) Section – 63
7-20. Schematic Diagram – Panel (2/2) Section – 65
7-21. Schematic Diagram – Surround Section – 67
7-22. Printed Wiring Board – Surround Section – 68
7-23. Schematic Diagram – Front Amp Section – 69
7-24. Printed Wiring Board – Front Amp Section – 71
7-25. Schematic Diagram – CD Motor Section – 73
7-26. Printed Wiring Board – CD Motor Section – 75
7-27. Schematic Diagram – Trans Section – 77
7-28. Printed Wiring Board – Trans Section – 78
7-29. IC Block Diagrams 79
7-30. IC Pin Functions 82

8. EXPLODED VIEWS
8-1. Case Section 92
8-2. Chassis Section 93
8-3. Front Panel Section 94
8-4. CD Mechanism Deck Section-1 (CDM38L-5BD34L) 95
8-5. CD Mechanism Deck Section-2 (CDM38L-5BD34L) 96
8-6. Base Unit Section (BU-5BD34L) 97
8-7. TC Mechanism Section-1 (TCM230AWR2/230PWR2) 98
8-8. TC Mechanism Section-2 (TCM230AWR2/230PWR2) 99

9. ELECTRICAL PARTS LIST 100

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

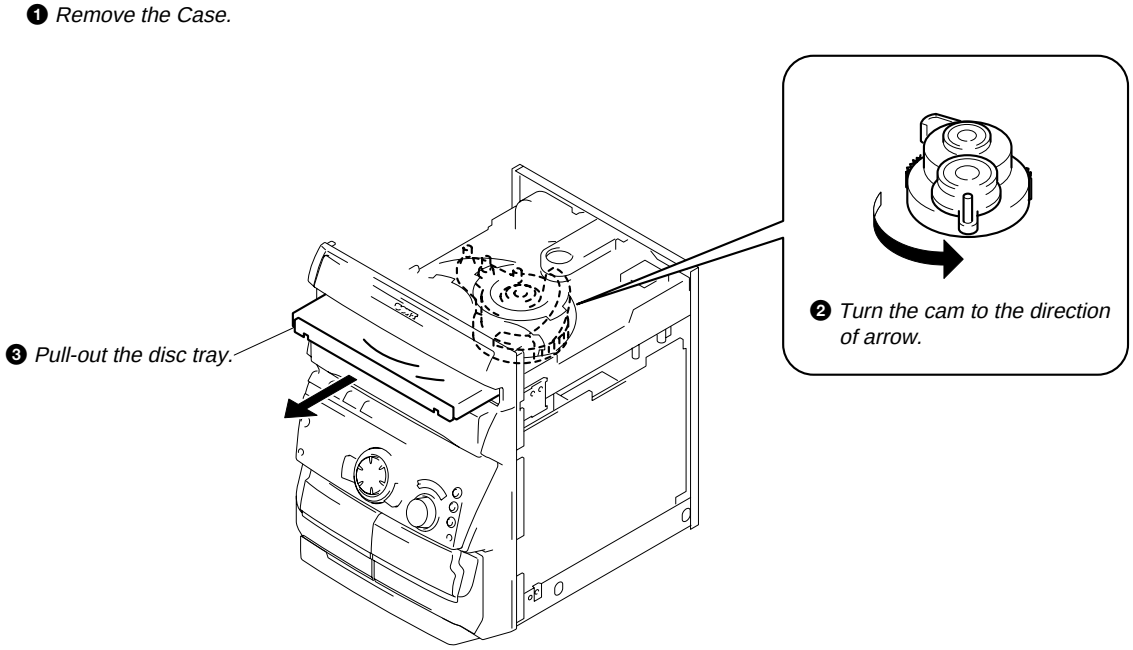
The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

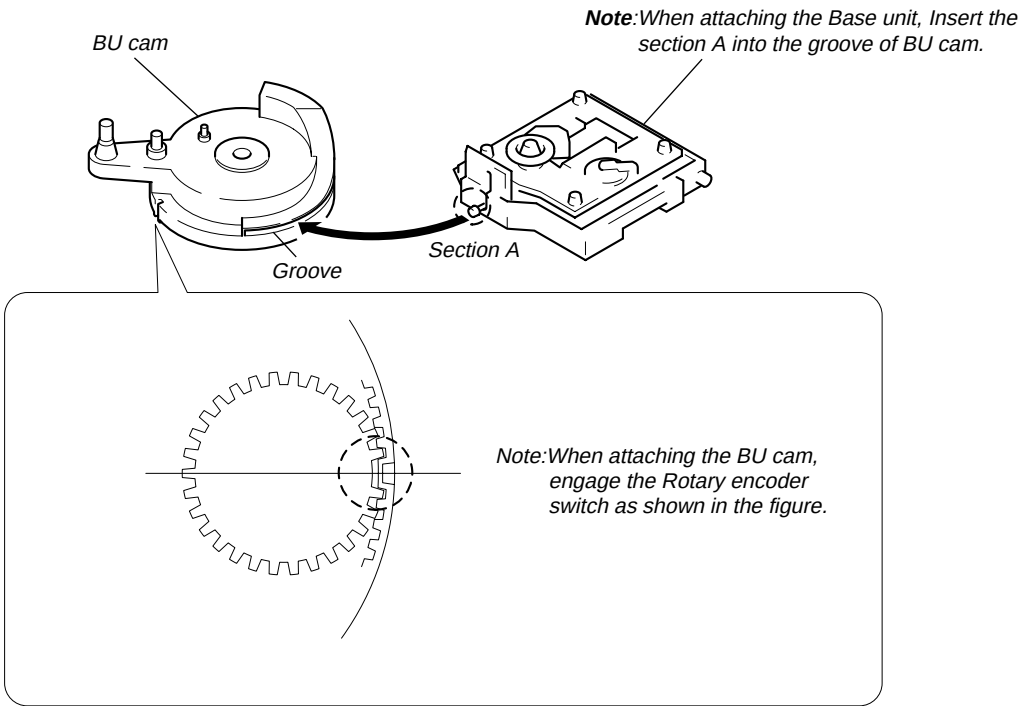
Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveform is output four times.

SECTION 1
SERVICING NOTE

HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF



Note for Installation (ROTARY ENCODER)


BU cam
Note:When attaching the Base unit, Insert the section A into the groove of BU cam.
Section A
Groove
Note:When attaching the BU cam, engage the Rotary encoder switch as shown in the figure.

CD-TEXT

This unit is provided with a simple CD-TEXT display function.
The CD-TEXT contents of 20 tracks are displayed on the fluorescent display tube.
Since the function is simple, some special characters may not be displayed, or may be displayed as other characters.

MC Cold Reset

• The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press three buttons [■] , [ENTER/NEXT] , and [I/⏻] simultaneously.
2. "COLD RESET" is displayed on the fluorescent display tube and reset is executed.

CD Delivery Mode

• This mode moves the optical pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Press [CD LOOP] button and [I/⏻] button simultaneously.
3. A message "LOCK" is displayed on the fluorescent indicator tube, and the CD delivery mode is set.

MC Hot Reset

• This mode resets the set with the preset data kept stored in the memory. The hot reset mode functions same as if the power cord is plugged in and out.

Procedure:

1. Press three buttons [■] , [ENTER/NEXT] , and [DISC 1] simultaneously.
2. The fluorescent indicator tube becomes blank instantaneously, and the set is reset.

Sled Servo Mode

• This mode can run the CD sled motor freely. Use this mode, for instance, when cleaning the optical pick-up.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Press three buttons [■] , [ENTER/NEXT] , and [⏏] simultaneously.
3. The Sled Servo mode is selected, if "CD" is blanking on the fluorescent indicator tube.
4. With the CD in stop status, When the [▶▶ +] button is pressed, the optical pick-up moves outside. When [– ◀◀] button is pressed, it moves inside.
5. To exit from this mode, perform as follows:
   1) Move the optical pick-up to the most inside track.
   2) Execute MC cold reset. (Press the three buttons [■] , [ENTER/NEXT] , and [I/⏻] button simultaneously.)

Note:

• Always move the optical pick-up to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
• Do not run the sled motor excessively, otherwise the gear can be chipped.

Change-over of AM Tuner Step between 9kHz and 10kHz

• A step of AM channels can be changed over between 9kHz and 10kHz.

Procedure:

1. Press [I/⏻] button to turn the set ON.
2. Select the function "TUNER", and press [TUNER/BAND] button to select the BAND "AM".
3. Press [I/⏻] button to turn the set OFF.
4. Press [ENTER/NEXT] and [I/⏻] buttons simultaneously, and the display of fluorescent indicator tube changes to "AM 9k STEP" or "AM 10k STEP", and thus the channel step is changed over.

LED and Fluorescent Indicator Tube All Lit, Key Check Mode

Procedure:

1. Press three buttons [■] , [ENTER/NEXT] , and [DISC 2] simultaneously.
2. LEDs and fluorescent indicator tube are all turned on.
   Press [DISC 2] button, and the key check mode is activated.
3. In the key check mode, the fluorescent indicator tube displays "K 0 V0 J0". Each time a button is pressed, "K"value increases. However, once a button is pressed, it is no longer taken into account.
   "J" Value increases like 1, 2, 3 ... if rotating [◀◀ AMS ▶▶] knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "-" direction.
   "V" Value increases like 1, 2, 3 ... if rotating [VOLUME] knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "-" direction.
4. To exit from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

AMS Test Mode

• This mode is used for checking the AMS operations of the tape deck.

JIG
7-819-039-12 Alignment tape, AMS-110A

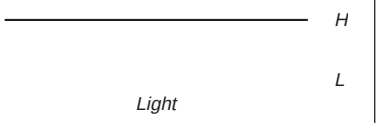
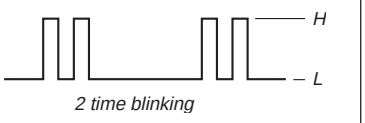
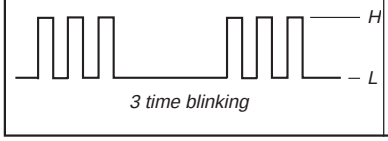
Procedure:

1. Press the I/⏻ button to turn the unit ON.
2. Set the tape (AMS-110A).
3. Press the three buttons ■ , ENTER/NEXT , and DISC 3 button simultaneously.
4. "TEST MODE" is displayed on the fluorescent display tube.
5. Press the FUNCTION button and switch the function to the deck with the tape (AMS-110A).
6. Press the CD SYNC button. "AMS CHECK" is displayed on the fluorescent display tube and the tape is rewound.
7. AMS starts in the normal direction. If the AMS count is 2 at shut down, proceed to step 8.
   "NG" is displayed at other times, and the deck stops.
8. AMS starts in the opposite direction. If the AMS count is 2 at shut down again, "OK" is displayed.
   "NG" is displayed at other times.

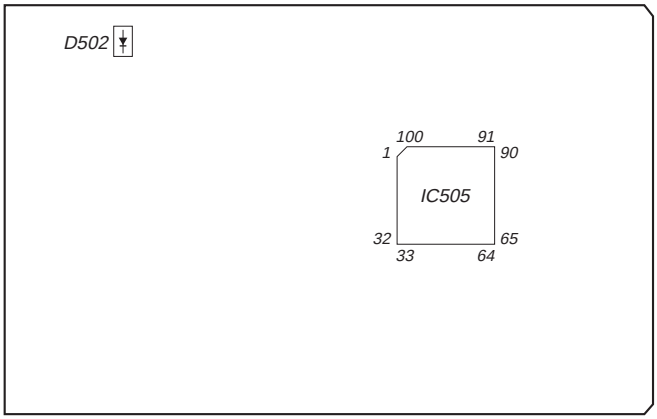
Note: The ■ button of CD section will become effective and the aging of CD section will stop sometime, if the buttons described in step 3 are not pressed simultaneously. In that case, press ▶II button and operate the CD section.

SELF-DIAGNOSIS

This model has the self-diagnosis function for the VIDEO and AUDIO decoder sections.
Immediately after the power on, the self-diagnosis function searches each operation of IC's around the mechanism control microcomputer (IC701).
The results can be checked by D502 of the VIDEO board.

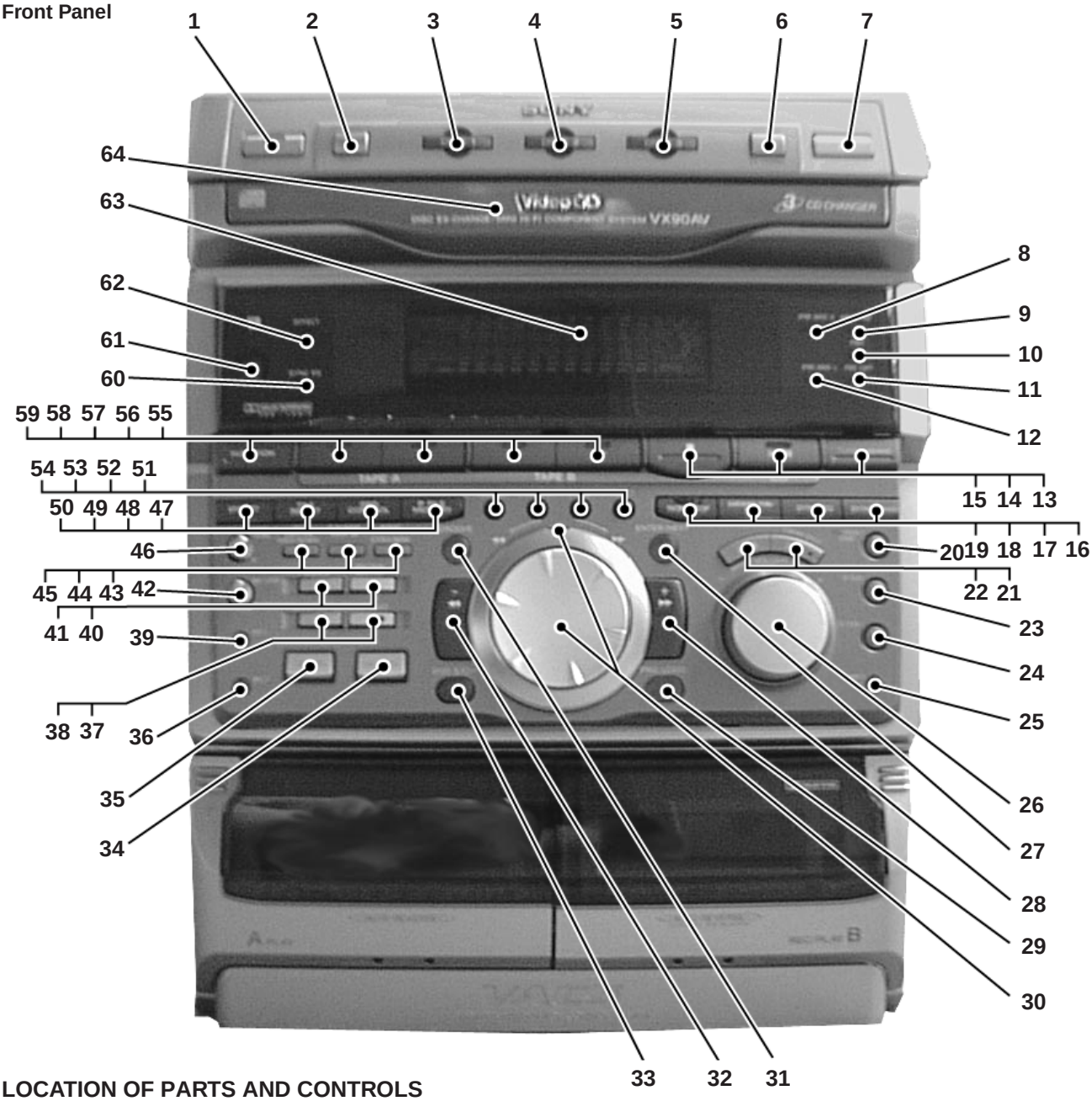
Oscilloscope (Waveform)	Symptom
	No error
	MPEG decoder (IC505) error
	MPEG decoder (IC505) or DRAM (IC507) error

[VIDEO BOARD] (SIDE A)



SECTION 2
GENERAL

Front Panel

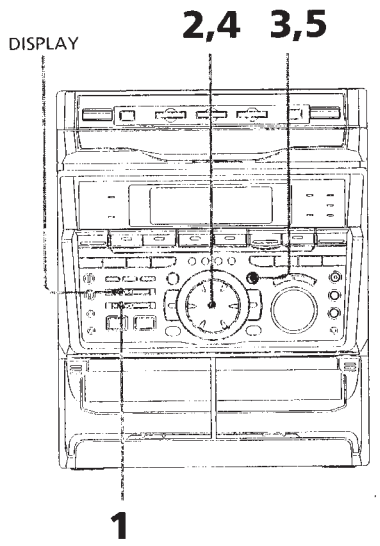


LOCATION OF PARTS AND CONTROLS

1 I/⏻ button and indicator
2 DEMO (STANDBY) button
3 DISC 1 button and indicator
4 DISC 2 button and indicator
5 DISC 3 button and indicator
6 DISC SKIP/EX–CHANGE button
7 ⏏ (Eject) button
8 SYNC BASS H indicator
9 VIDEO CD indicator
10 PBC indicator
11 PBC OFF indicator
12 SYNC BASS L indicator
13 TUNER/BAND button
14 ▶II (CD) button and indicator
15 ■ button
16 SYNC BASS button
17 SYNC EQ button
18 KARAOKE PON/MPX button
19 NON-STOP button and indicator
20 REC PAUSE/START button and indicator
21 CINEMA SPACE/DSP button and indicator
22 DBFB button
23 HI-DUB button
24 CD SYNC button
25 PHONES jack
26 VOLUME knob
27 ENTER/NEXT button
28 ▶▶ + button and indicator
29 PRO LOGIC button and indicator
30 JOG/◀◀ ▬▬ ▶▶ dial and indicator
31 GROOVE button and indicator
32 ◀◀ – button and indicator
33 DUB 5.1 CH button
34 CD FLASH button
35 CD LOOP button
36 MIC 2 jack
37 TIMER SELECT button and indicator
38 CLOCK/TIME SET button
39 MIC 1 jack
40 SPECTRUM ANALYZER button
41 DISPLAY button
42 MIC LEVEL knob
43 REPEAT/STEREO/MONO button
44 PLAY MODE/DOLBY NR button
45 EDIT DIRECTION/TUNER MEMORY button
46 ECHO LEVEL knob
47 P FILE MEMORY button
48 GEQ CONTROL button
49 FILE SELECT button
50 EFFECT button
51 NEXT button
52 PREV button
53 RETURN button
54 SELECT button
55 ► (TAPE B) button and indicator
56 ◄ (TAPE B) button and indicator
57 ► (TAPE A) button and indicator
58 ◄ (TAPE A) button and indicator
59 FUNCTION button
60 SYNC EQ indicator
61 Remote sensor
62 EFFECT indicator
63 Display Window
64 Disc tray

Step 3: Setting the time

You must set the time before using the timer functions.



1 Press CLOCK/TIMER SET.
The hour indication flashes.

2 Turn the jog dial to set the hour.

3 Press ENTER/NEXT.
The minute indication flashes.

4 Turn the jog dial to set the minute.

5 Press ENTER/NEXT.
The clock starts working.

Tip

If you've made a mistake, start over from step 1.

To change the time

The previous explanation shows you how to set the time while the power is off. To change the time while the power is on, do the following:

1 Press CLOCK/TIMER SET.
2 Turn the jog dial to select SET CLOCK.
3 Press ENTER/NEXT.
4 Perform steps 2 through 5 above.

Note

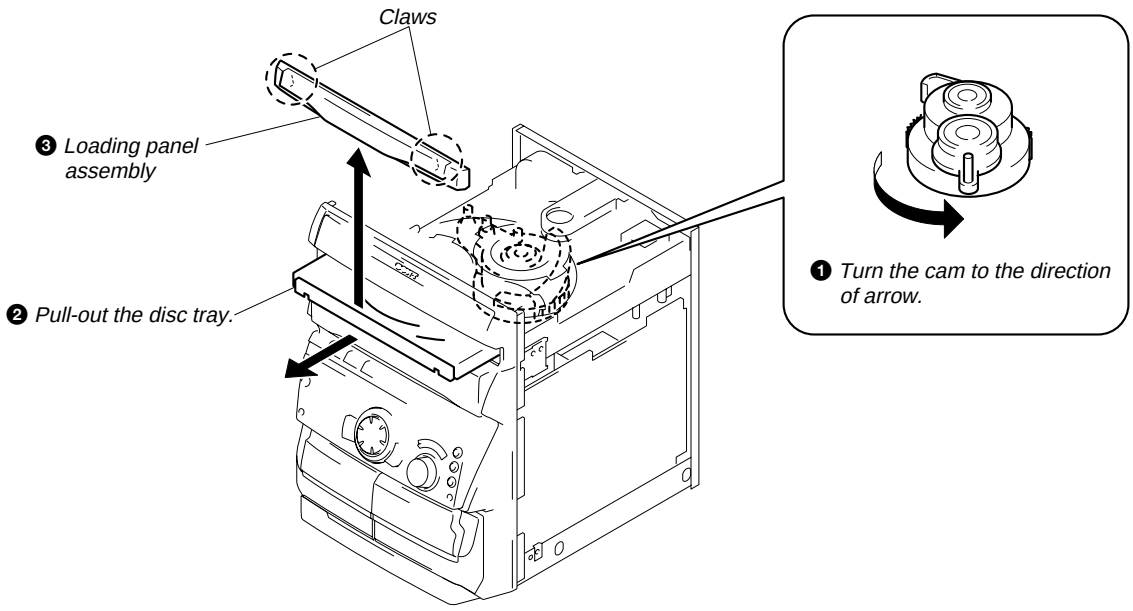
The clock settings are cancelled when you disconnect the power cord or if a power failure occurs.

This section is extracted from instruction manual.

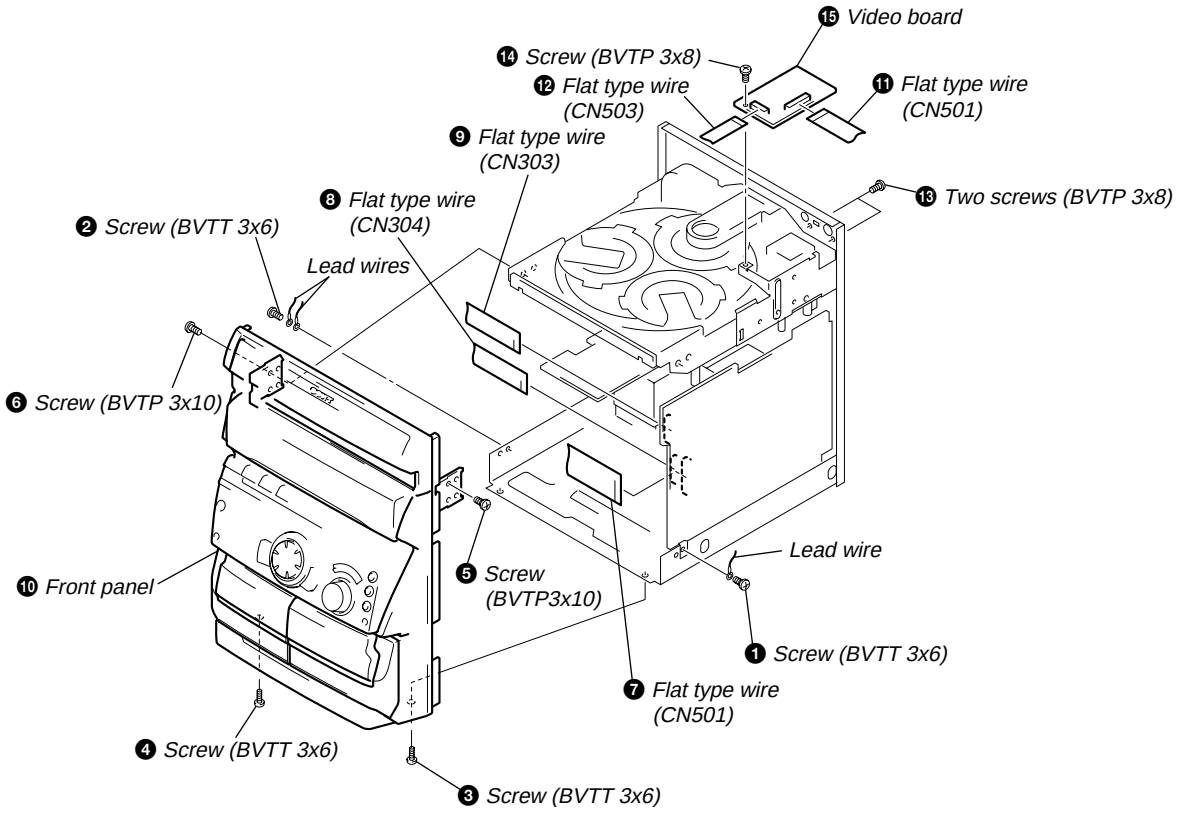
SECTION 3
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

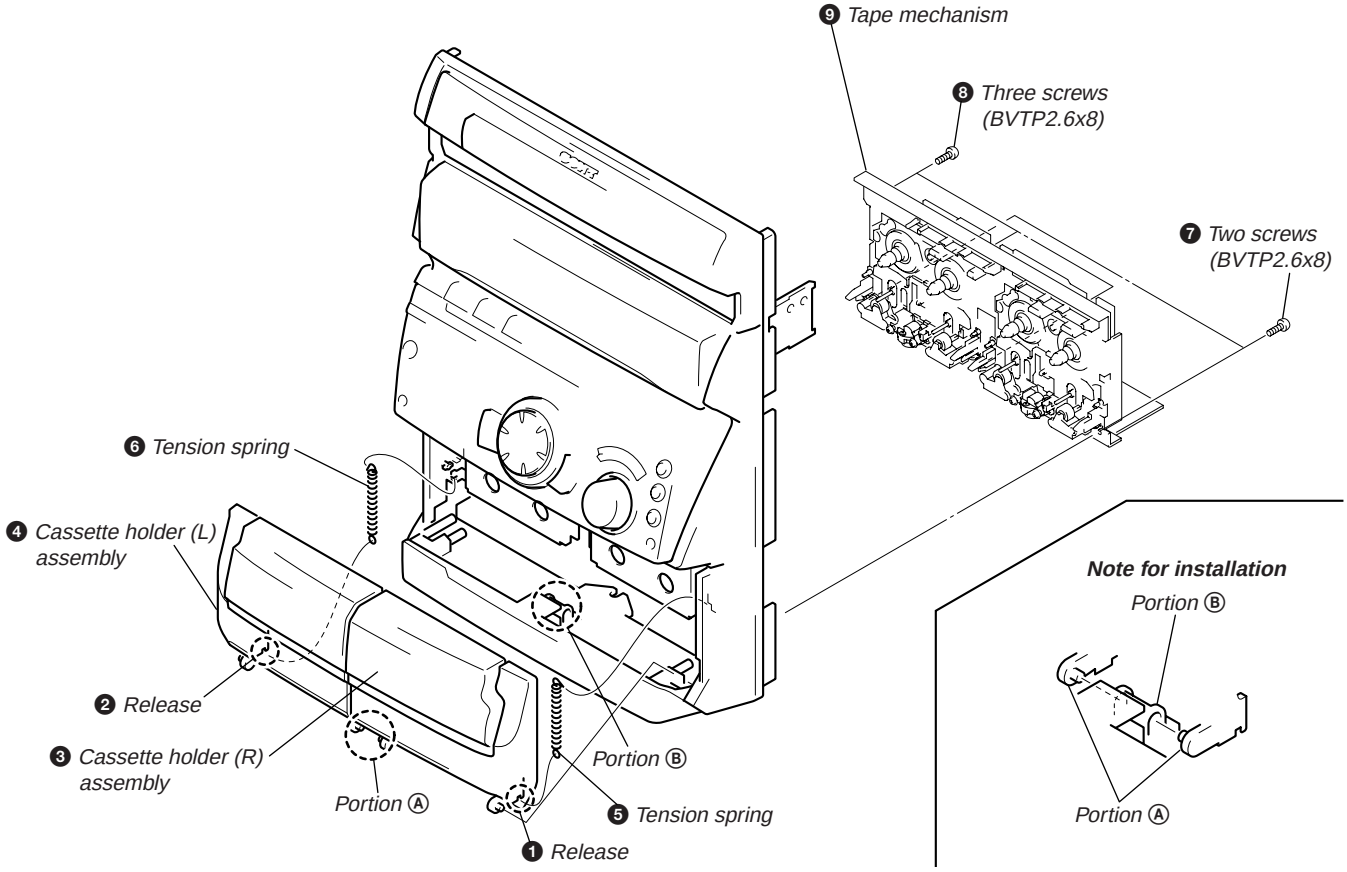
3-1. LOADING PANEL



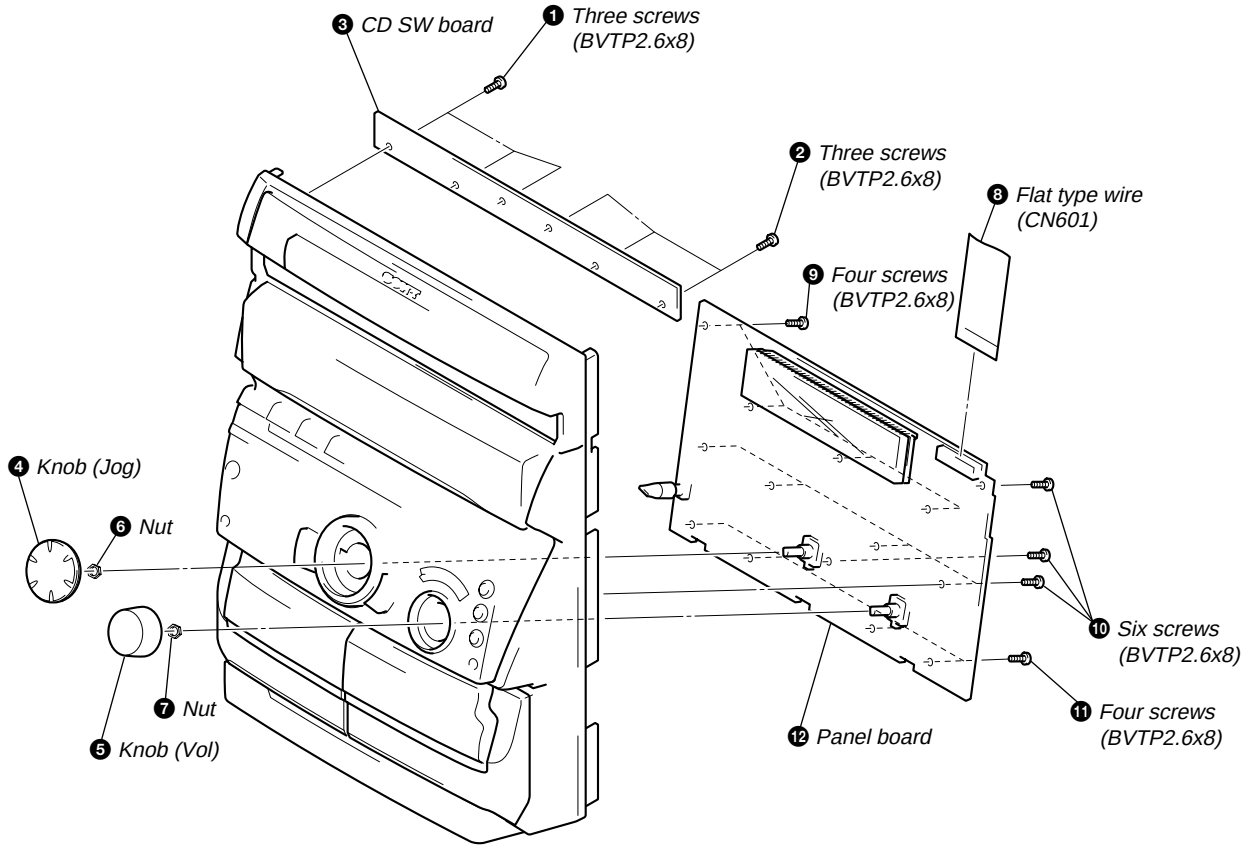
3-2. FRONT PANEL



3-3. CASSETTE LID AND TAPE MECHANISM

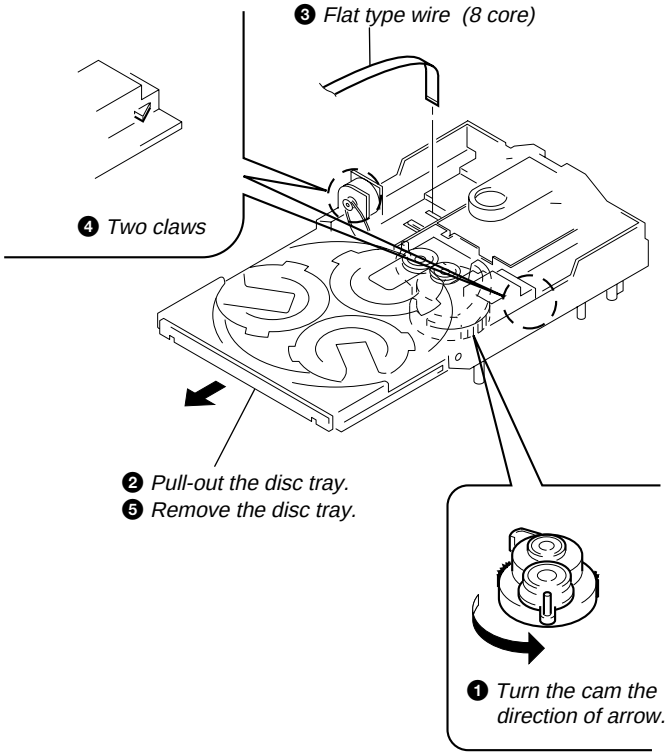


3-4. CD SW BOARD AND PANEL BOARD

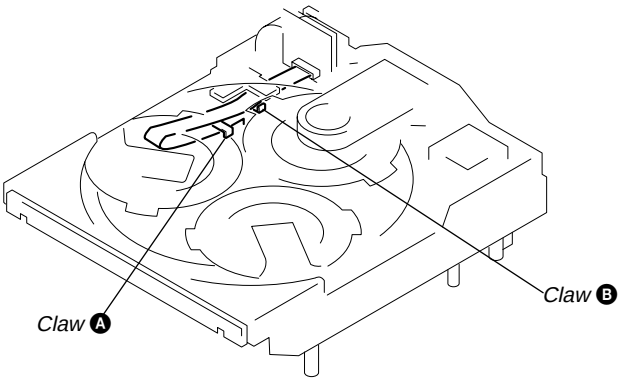


3-5. DISC TRAY

(Perform after removing the front panel.)



Note: *When installing the Disc tray, pull around the flat type wire to pass through the claw Ⓐ and claw Ⓑ, as shown in the figure.*



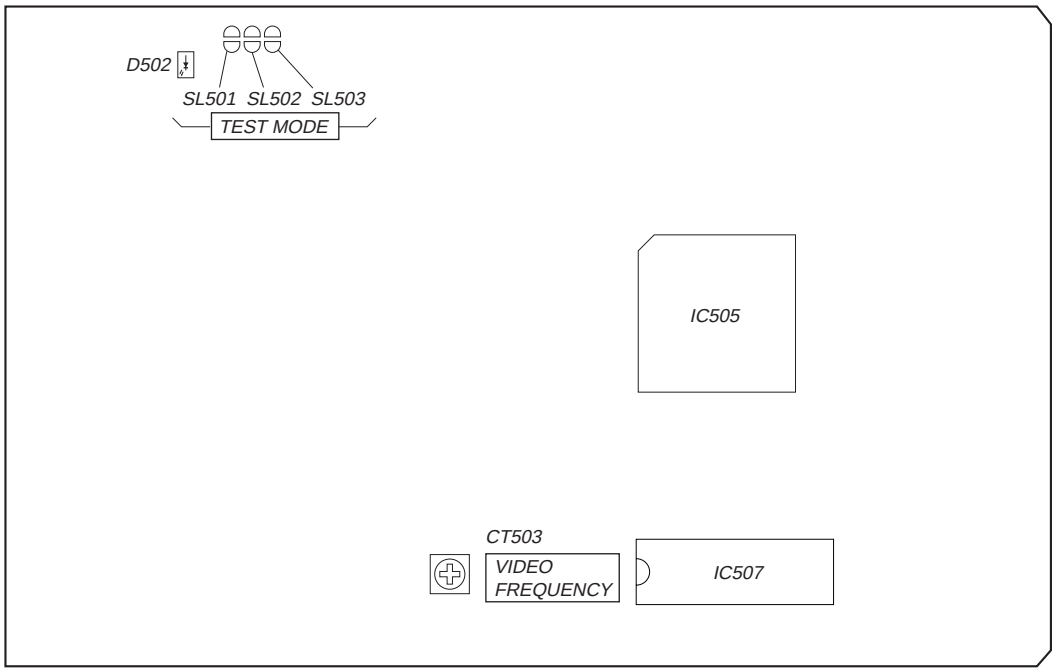
SECTION 4
TEST MODE

VIDEO CD COLOR-BARS MODE

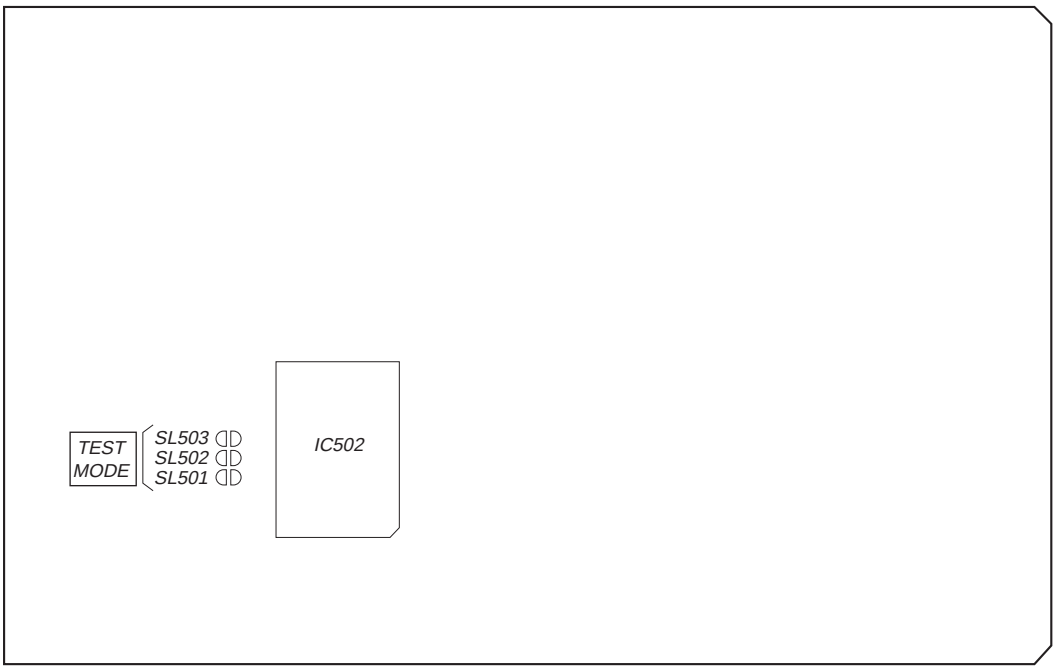
On this mode, the data of the color-bars signal as a picture signal and the 1kHz sine wave signal as a sound signal are output by the mechanism control microcomputer (IC502) for video CD signal check. When measurement of the voltage and waveform on the VIDEO board, perform it in this mode.
For reference, the color-bars signal can be observed at J302 (VIDEO OUT) and the sound signal can be observed at J101 (VIDEO/MD (AUDIO) OUT) using an oscilloscope.

1. Connect the lead wire to both ends of the land of SL503 of the VIDEO board.
2. Turn the power on. Press FUNCTION button to select CD.
3. After 2 or 3 seconds later, connect the lead wire.
4. After measuring, remove the lead wire connected.

[VIDEO BOARD] (SIDE A)



[VIDEO BOARD] (SIDE B)



SECTION 5
MECHANICAL ADJUSTMENTS

Precaution

1. Clean the following parts with a denatured alcohol-moistened swab:
   record/playback heads — pinch rollers
   erase head — rubber belts
   capstan — idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	31 to 71 g • cm (0.43 – 0.98 oz • inch)
FWD back tension	CQ-102C	2 to 6 g • cm (0.02 – 0.08 oz • inch)
REV	CQ-102RC	31 to 71 g • cm (0.43 – 0.98 oz • inch)
REV back tension	CQ-102RC	2 to 6 g • cm (0.02 – 0.08 oz • inch)
FF/REW	CQ-201B	71 to 143 g • cm (0.98 – 1.99 oz • inch)
FWD tension	CQ-403A	100 g or more (3.53 oz or more)
REV tension	CQ-403R	100 g or more (3.53 oz or more)

SECTION 6
ELECTRICAL ADJUSTMENTS

DECK SECTION **0 dB=0.775V**

1. Demagnetize the record/playback head with a head damagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjusted.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.

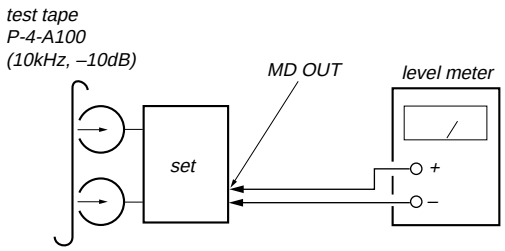
Tape	Signal	Used for
P-4-A100	10 kHz, –10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment
P-4-L300	315 Hz, 0 dB	Level Adjustment

Record/Playback Head Azimuth Adjustment (Deck A, Deck B)

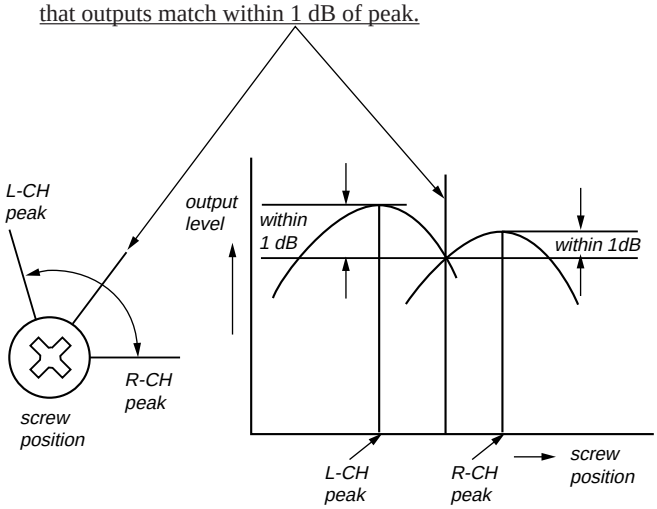
Note: Perform this adjustments for both decks.

Procedure:

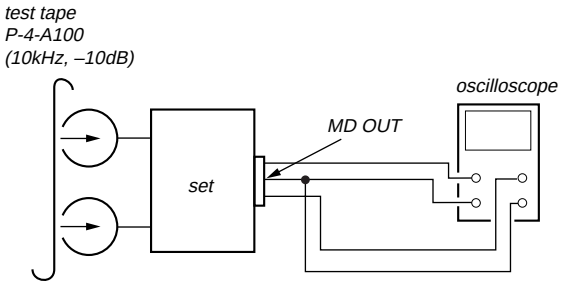
1. Mode : Playback

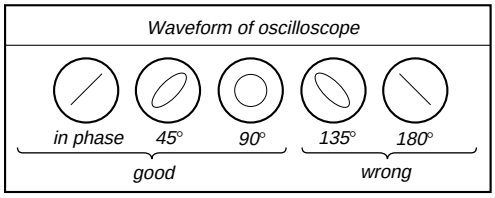


2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1 dB of peak.



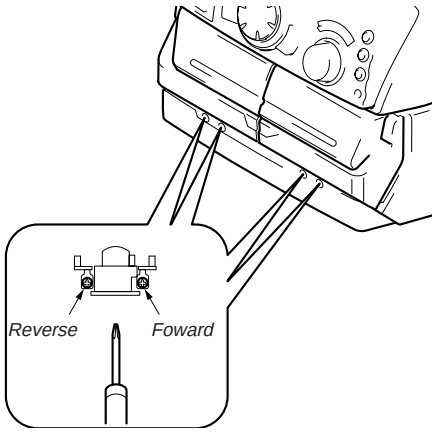
3. Mode: Playback





4. After the adjustments, apply suitable locking compound to the parts adjusted.

Adjustment Location: Playback Head (Deck A)
Record/Playback/Erase Head (Deck B)



Tape Speed Adjustment (Deck B)

Note: Set the test mode using the following method and begin tape speed adjustment.
In the test mode, the speed will switch to double speed or normal speed each time the HI DUB button is pressed.

Procedure:
With the power turned ON, press the ■ button, ENTER/NEXT button, and DISC 3 button simultaneously.
(The "CD TYPE INDICATOR" on the fluorescent display tube will blink while in the test mode.)
To exit the test mode, press the I/⏻ button.

1. Insert the WS-48B into deck B.
2. Press the ► button of deck B.
3. Press the HI DUB button and play the tape at double speed.
4. Adjust RV1001 of the LEAF SW board so that the reading of the frequency counter becomes 6000 ± 180 Hz.
5. Press the HI DUB button and play the tape at normal speed.
6. Adjust RV1002 of the LEAF SW board so that the reading of the frequency counter becomes 3000 ± 90 Hz.

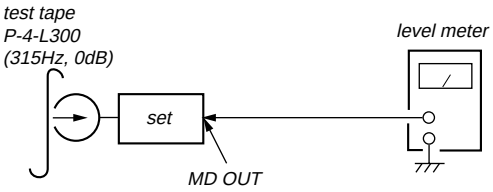
Adjustment Location: LEAF SW board

Sample Value of Wow and flutter

W.RMS (JIS) less than 0.3%
(test tape: WS-48B)

Playback Level Adjustment (Deck A, Deck B)

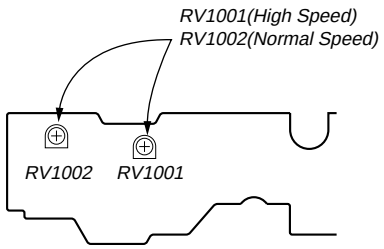
Procedure:
Mode: Playback



Deck A is RV311 (L-CH) and RV411 (R-CH), deck B is RV301 (L-CH) and RV401 (R-CH)
so that adjustment within the following adjustment level.

Adjustment level:
CN301 playback level: 301.5 to 338.3 mV (–8.2 to –7.2 dB)
level difference between the channels: within ± 0.5 dB
Adjustment Location: AUDIO board

Adjustment Location [LEAF SW BOARD]



Record Bias Adjustment (Deck B)

Procedure:

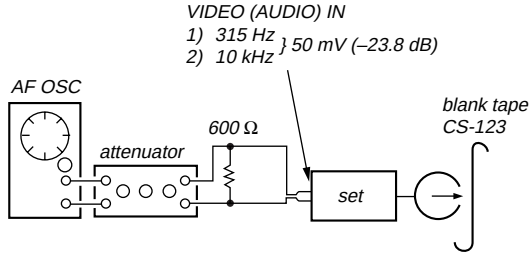
INTRODUCTION

When set to the test mode performed in **Tape Speed Adjustment**, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.

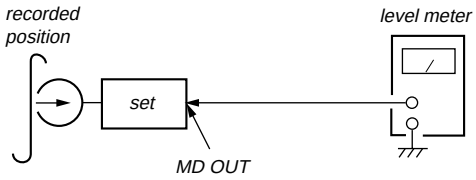
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO.

(After recording, press the [– ◀◀] button without stopping will return to the position where recording was started.)

1. Press [FUNCTION] button to select VIDEO. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B, press the [● REC] button, and then press the [►] button to start recording.
3. Mode: Record



4. Mode: Playback



5. Confirm playback the signal recorded in step 2 become adjustment level as follows.
   If these levels do not adjustment level, adjust the RV341 (L-CH) and RV441 (R-CH) on the AUDIO board to repeat steps 3 and 4.

Adjustment level: The playback output of 10 kHz level difference against 315 Hz reference should be ± 1.0 dB.

Adjustment Location: AUDIO board

Record Level Adjustment (Deck B)

Procedure:

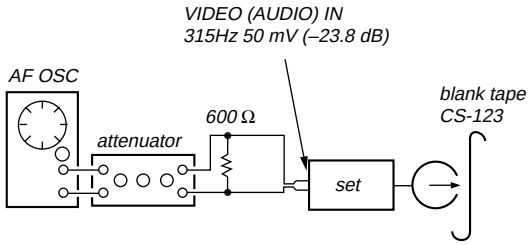
INTRODUCTION

When set to the test mode performed in **Tape Speed Adjustment**, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.

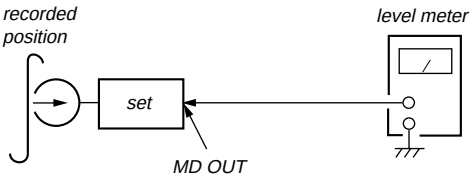
This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO.

(After recording, press the [– ◀◀] button without stopping will return to the position where recording was started.)

1. Press [FUNCTION] button to select VIDEO 1. (This step is not necessary if the above test mode has already been set.)
2. Insert a tape into deck B, press the [● REC] button, and then press the [►] button to start recording.
3. Mode: Record



4. Mode: Playback

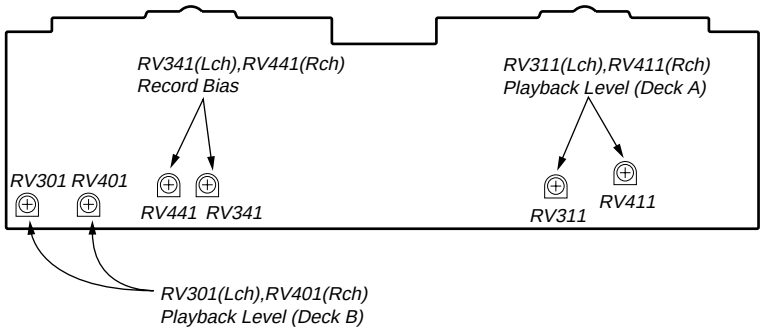


5. Confirm playback the signal recorded in step 2 become adjustment level as follows.
   If these levels do not adjustment level, adjust the RV301 (L-CH) and RV351 (R-CH) on the MAIN board to repeat steps 3 and 4.

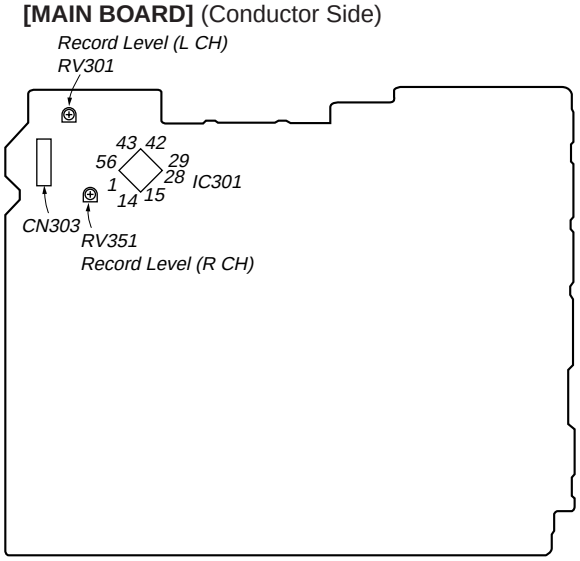
Adjustment level:
CN403 playback level: 47.2 to 53.0 mV (–24.3 to –23.3 dB)

Adjustment Location: MAIN board

Adjustment Location:
[AUDIO BOARD] (Conductor Side)



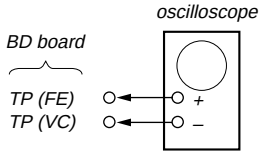
[MAIN BOARD] (Conductor Side)



CD SECTION

Note:
1. CD Block is basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

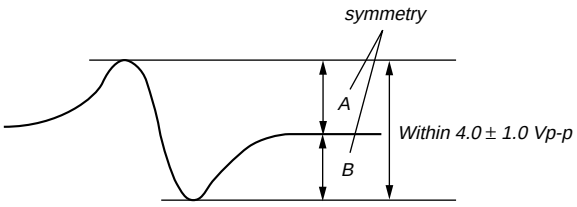
S Curve Check



Adjustment Location: BD board

Procedure :
1. Connect the oscilloscope to test points TP (FE) and TP (VC).
2. Connect TP (FEI) and GND, and TP (AGCCON) and GND of the BD board with lead wires.
3. Press the I/⏻ button to turn the set ON.
4. With the disc (YEDS-18) loaded, press the ▶II button and perform focus search. (Focus search will be performed in the same way even while the disc table is pushed in and out.)
5. Check the symmetry and peak to peak level of the oscilloscope waveform (S curve) at this time.

S-curve waveform

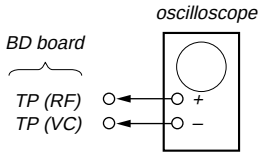


6. After check, remove the lead wire connected in step 2.

Note: • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

Adjustment Location: BD board

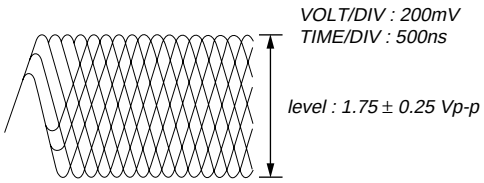
RF Level Check



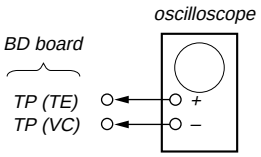
Procedure :
1. Connect oscilloscope to test point TP (RF) and TP (VC) on BD board.
2. Connect TP (AGCCON) and GND of the BD board with lead wires.
3. Press the I/⏻ button to turn the set ON.
4. Put disc (YEDS-18) in and playback 5track.
5. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.
6. After check, remove the lead wire connected in step 2.

Note: Clear RF signal waveform means that the shape "◊" can be clearly distinguished at the center of the waveform.

RF signal waveform



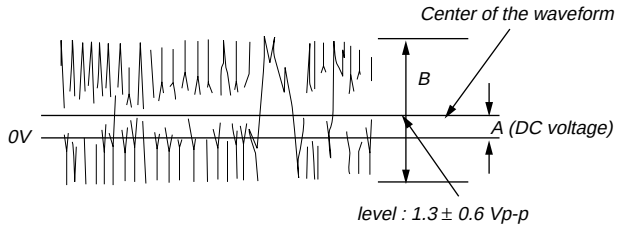
E-F Balance (Traverse) Check



Adjustment Location: BD board

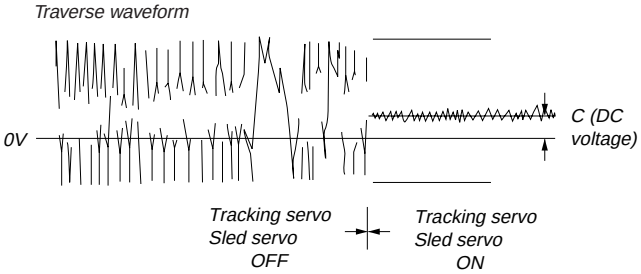
Procedure :
1. Connect oscilloscpe to test point TP (TE) on BD board.
2. Short-circuit SL502 of the video board to GND.
3. Turned Power switch on. Press FUNCTION button to select CD.
4. Put disc (YEDS-18) in to play the number five track.
5. Press the PLAY MODE/DOLBY NR button. (The tracking servo and the sledding servo are turned OFF.)
6. Check the level B of the oscilliscope's waveform and the A (DC voltage) of the center of the Traverse waveform.
   Confirm the following :
   A/B x 100 = less than ± 22%

Traverse waveform



7. Press the PLAY MODE/DOLBY NR button. (The tracking servo and sledding servo are turned ON.) Confirm the C (DC voltage) is almost equal to the A (DC voltage) is step 7.

Traverse waveform

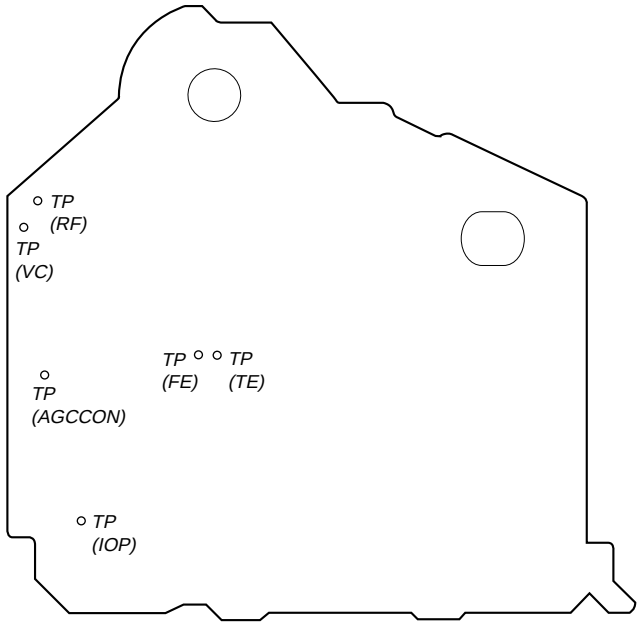


8. Desolder the short-land (SL502) short-circuited at step 2.

Adjustment Location: BD board

Adjustment Location :

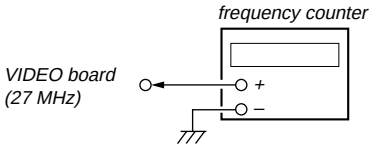
[BD BOARD] — SIDE B —



VIDEO SECTION

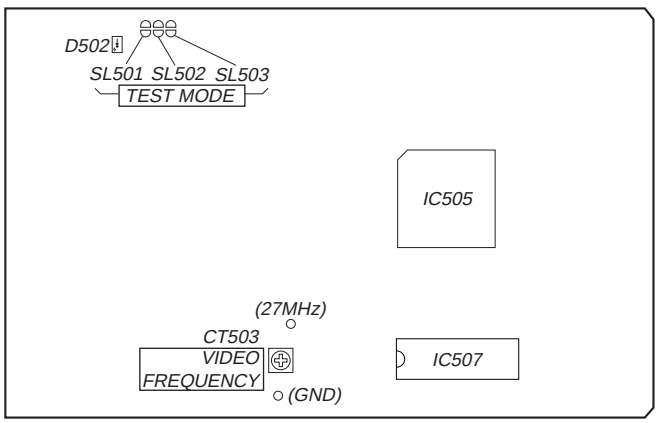
Frequency adjustment

1. Connect the frequency counter to check point of the VIDEO board.
2. Adjust CT503 of the VIDEO board so that the frequency counter read 27MHz ± 80Hz at STOP condition.

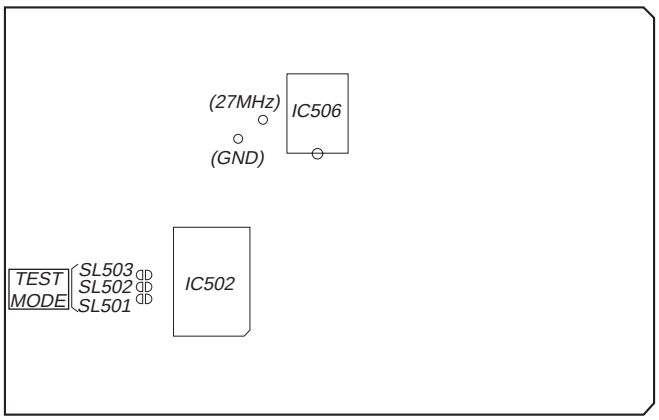


Adjustment Location :

[VIDEO BOARD] – SIDE A –

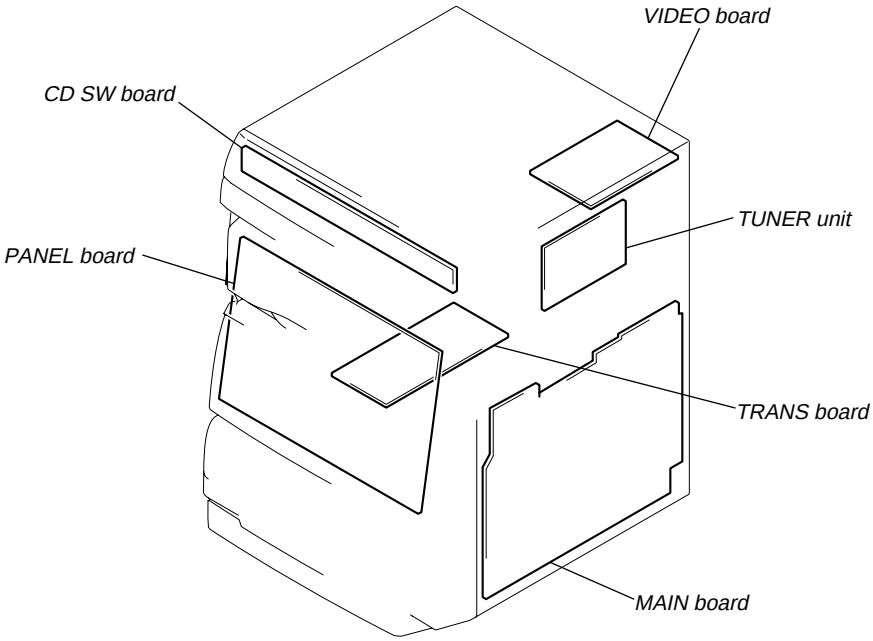


[VIDEO BOARD] – SIDE B –

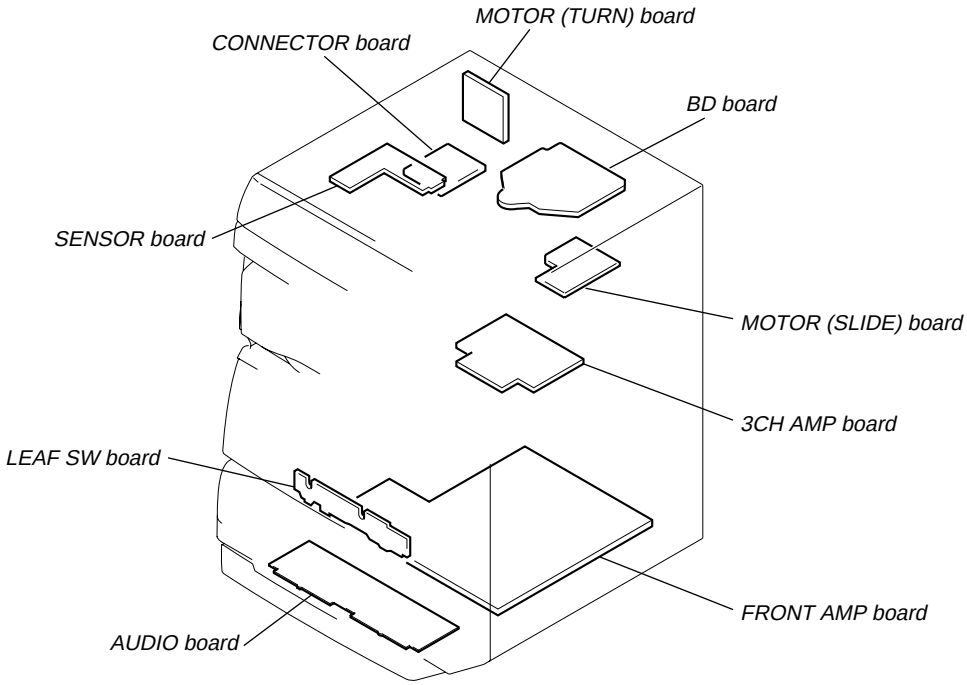


SECTION 7
DIAGRAMS

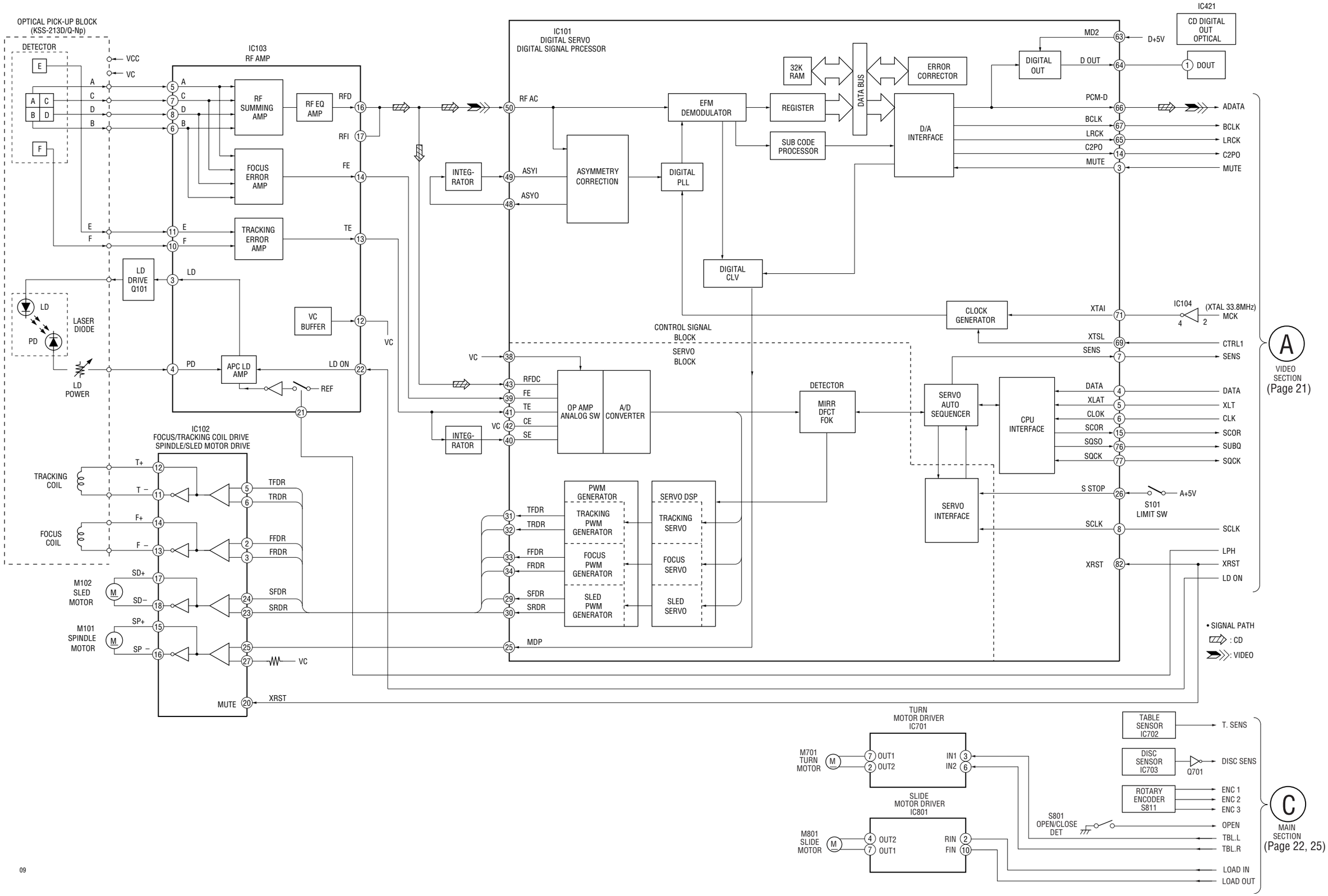
7-1. CIRCUIT BOARDS LOCATION



TUNER unit is supplied as the assembled block.

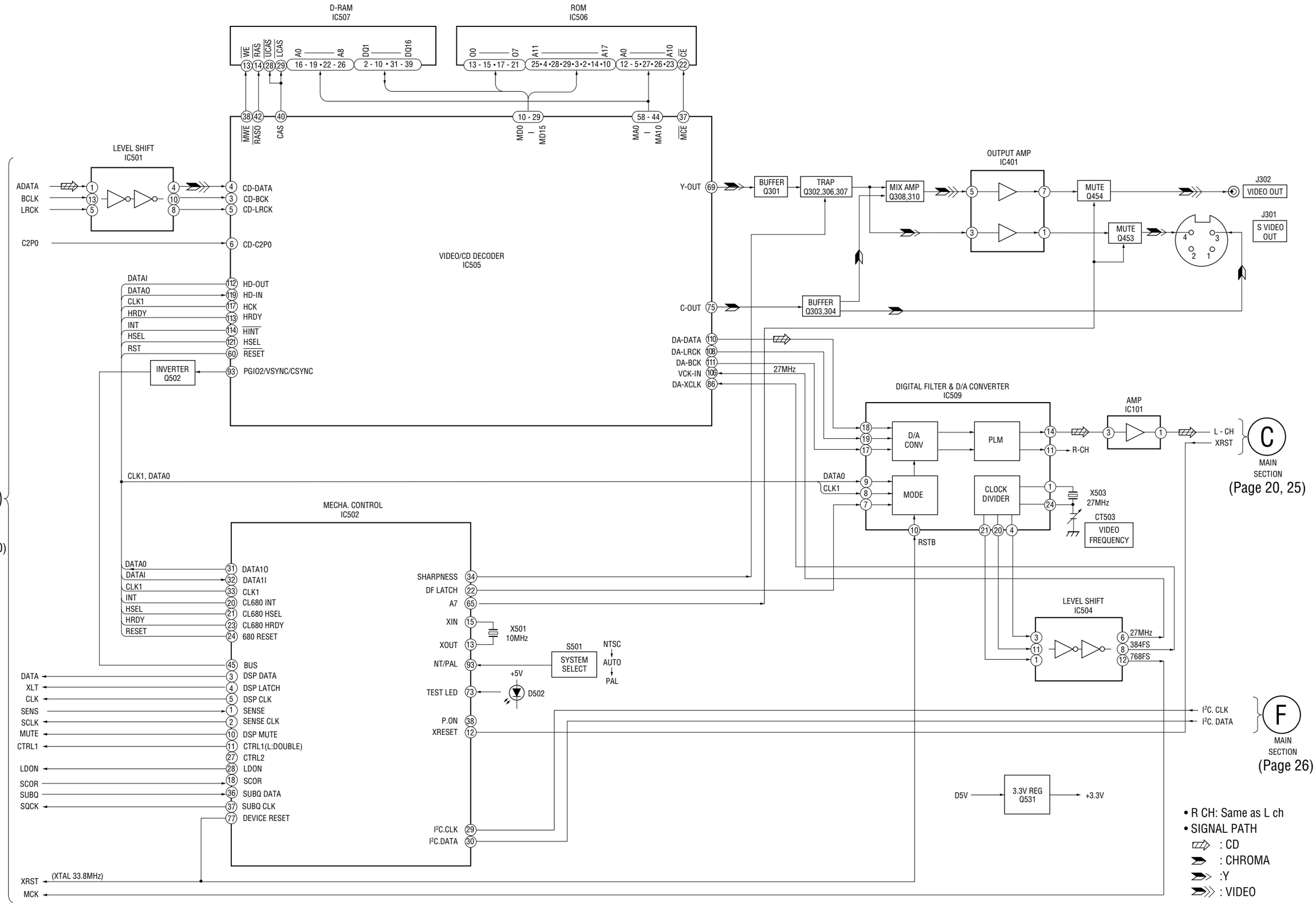


7-2. BLOCK DIAGRAMS
– CD SECTION –

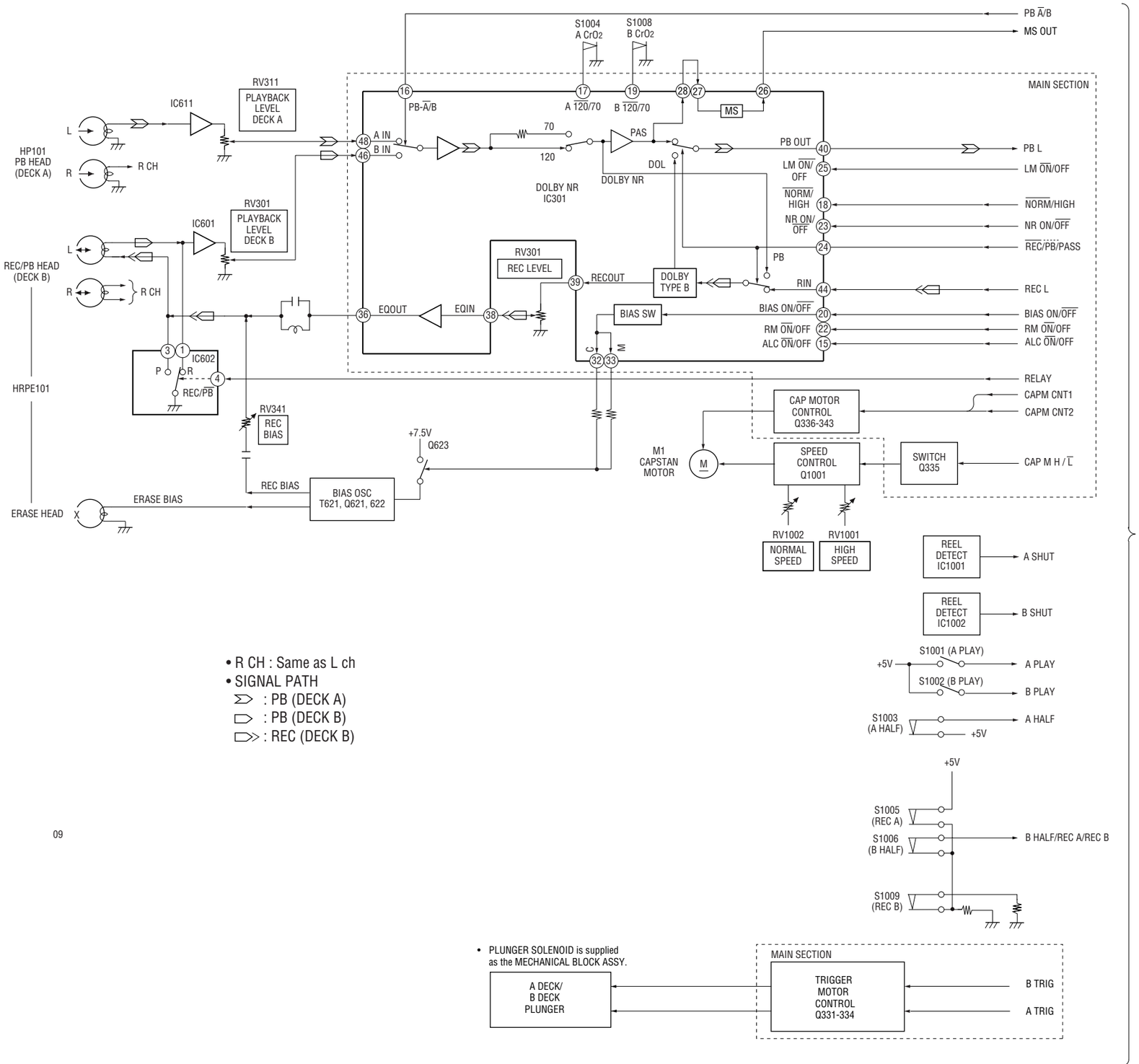


09

– VIDEO SECTION –



– DECK SECTION –

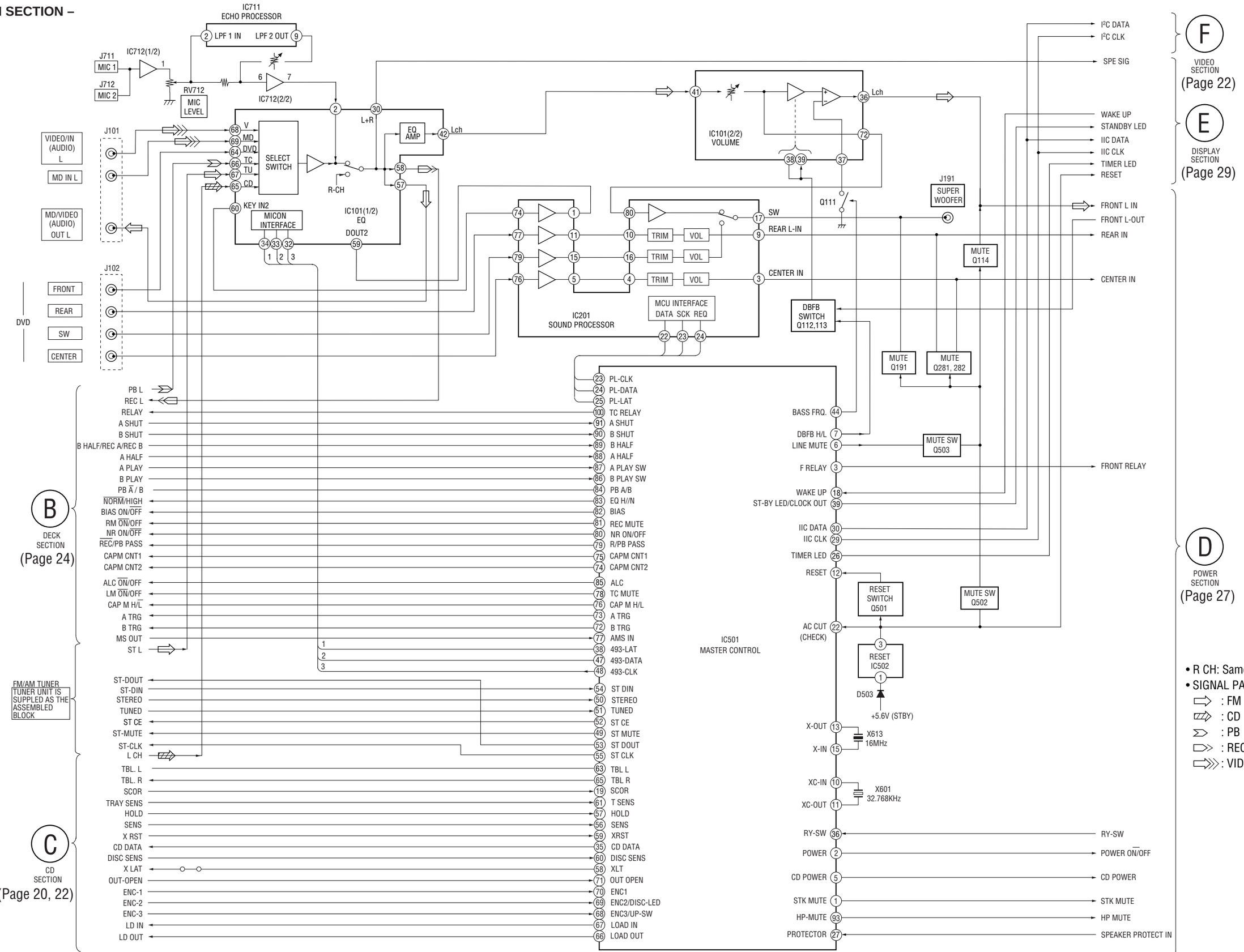


B
MAIN SECTION
(Page 25)

• R CH : Same as L ch
• SIGNAL PATH
: PB (DECK A)
: PB (DECK B)
: REC (DECK B)

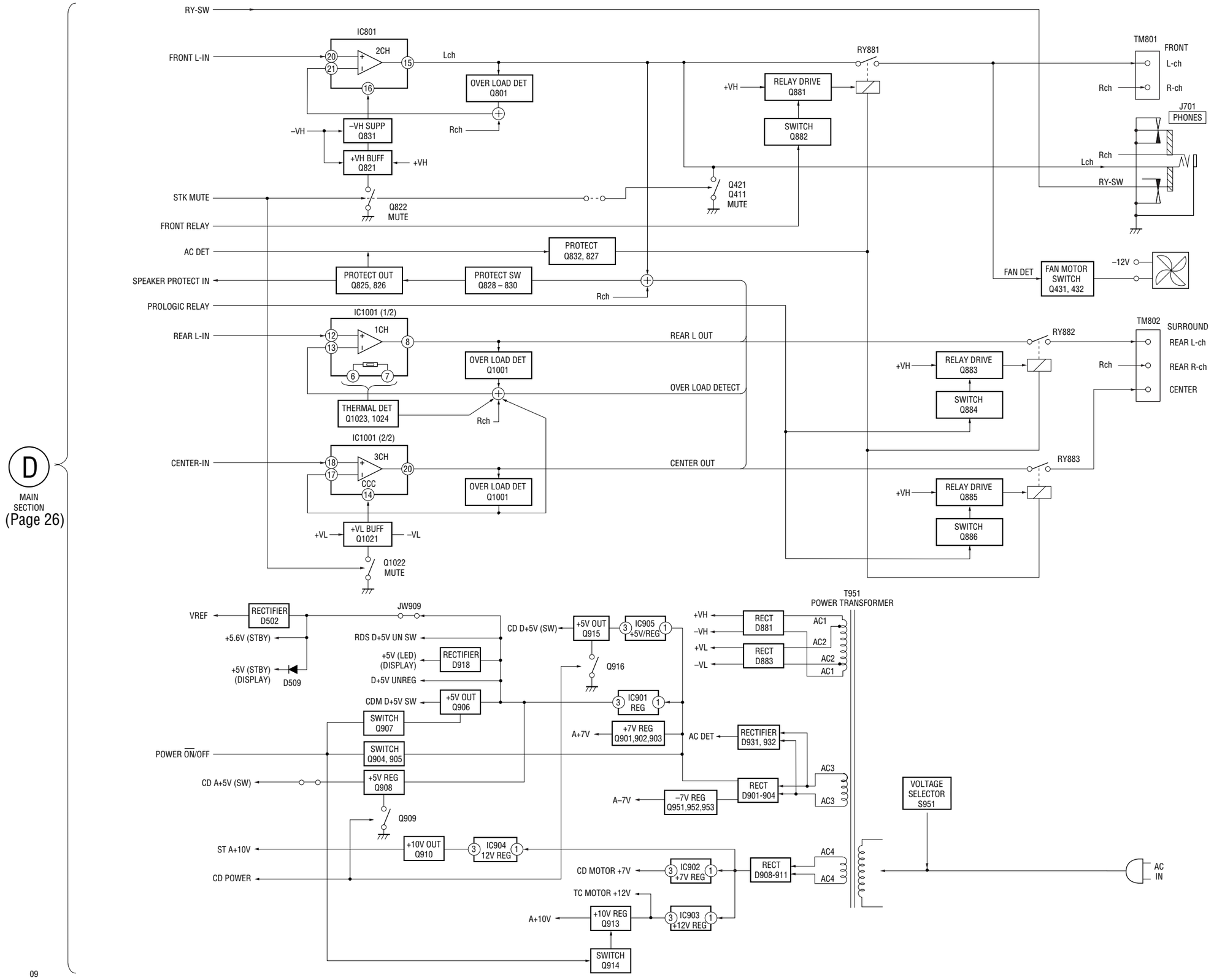
09

– MAIN SECTION –



09

– POWER SECTION –

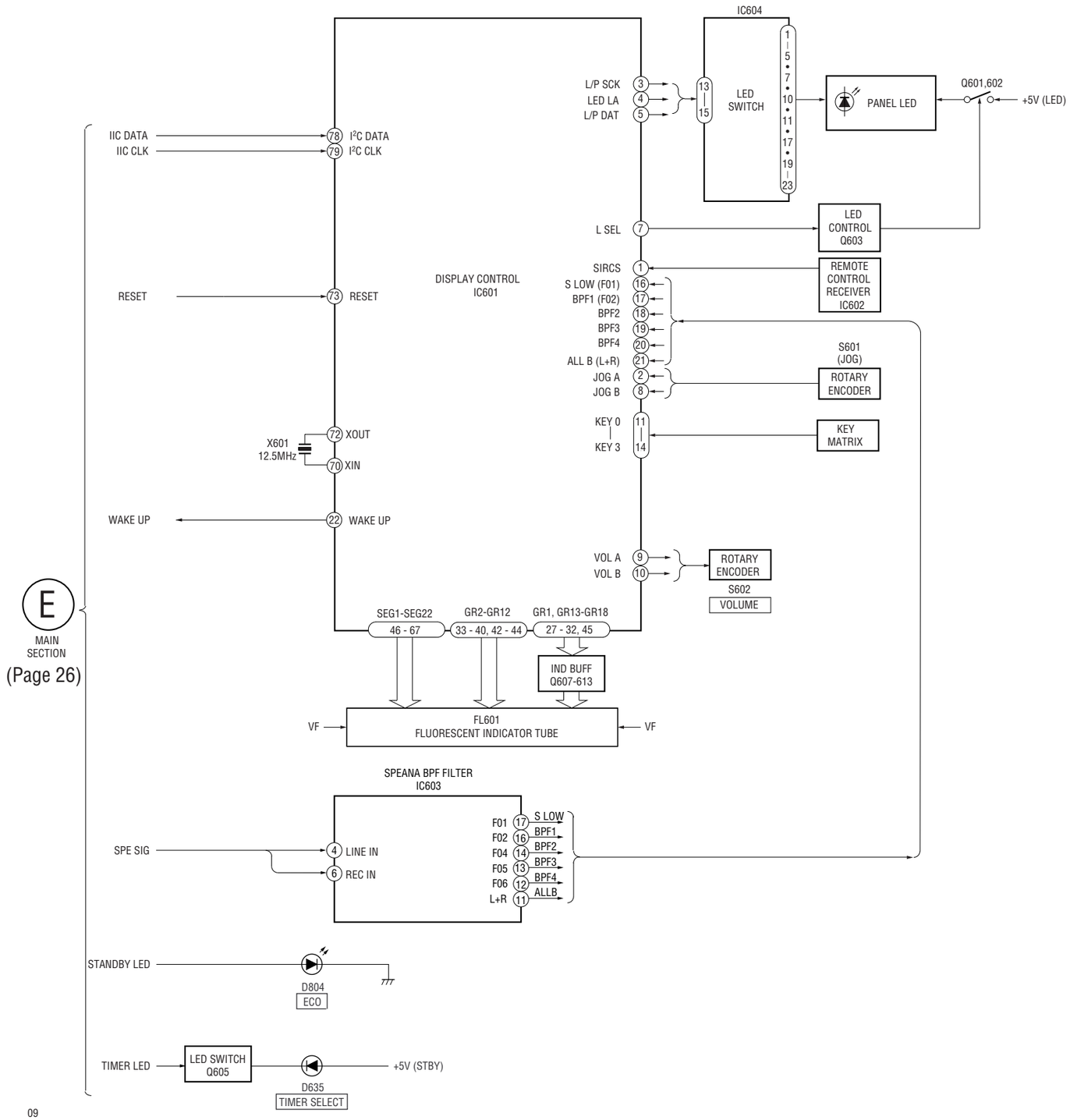


D

MAIN SECTION (Page 26)

09

– DISPLAY SECTION –



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

- B+ : B+ Line.
- B– : B– Line.
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : FM
  - : VIDEO/MD
  - : PB (DECK A)
  - : PB (DECK B)
  - : REC (DECK B)
  - : CHROMA
  - : Y
  - : VIDEO
  - : CD
  - : digital out
- Abbreviation
  - EA : Saudi Arabia model.
  - SP : Singapore model.
  - MY : Malaysia model.
  - HK : Hong Kong model.
  - TW : Taiwan model.
  - IA : Indonesian model.
  - TH : Thai model.

For printed wiring boards.

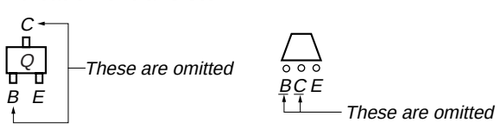
Note:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ○ : Through hole.
- ▒▒ : Pattern from the side which enables seeing.

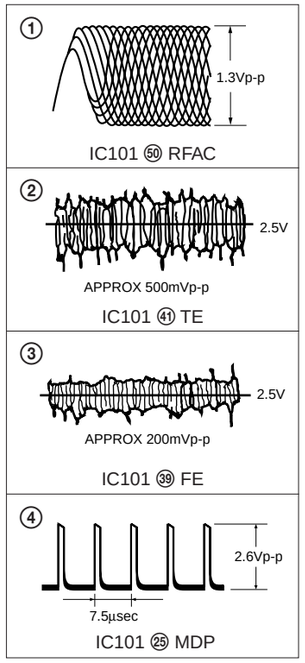
(The other layers' patterns are not indicated.)

Caution:
Pattern face side: (Side B) Parts on the pattern face are indicated.
Parts face side: (Side A) Parts on the parts face side seen from the parts face are indicated.

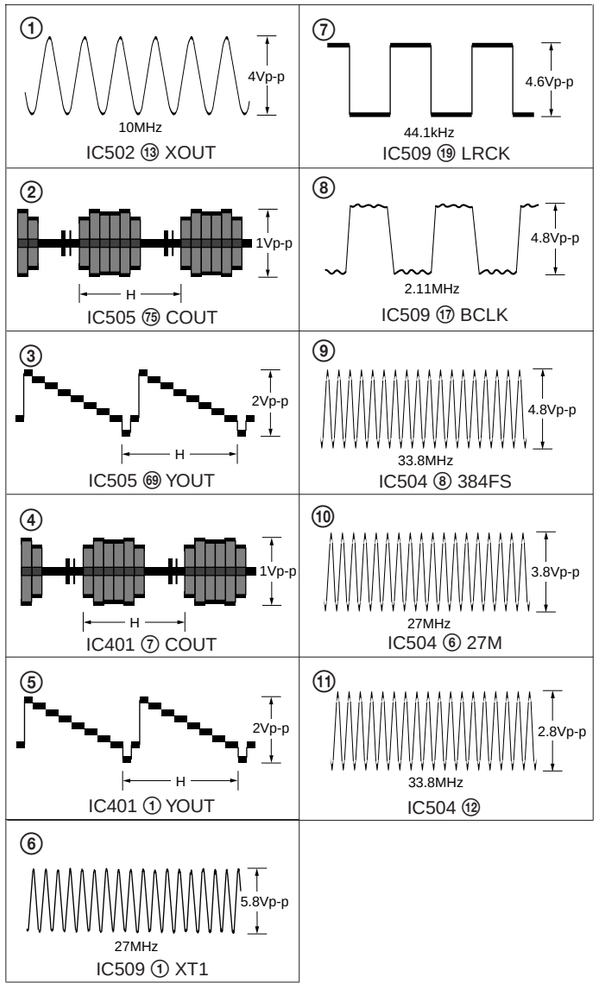
- **Indication of transistor**



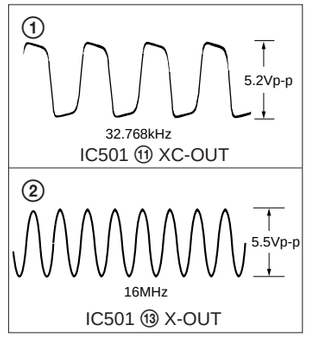
WAVEFORMS
– CD SECTION –



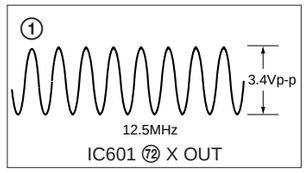
– VIDEO SECTION –



– MAIN (3/4) SECTION –

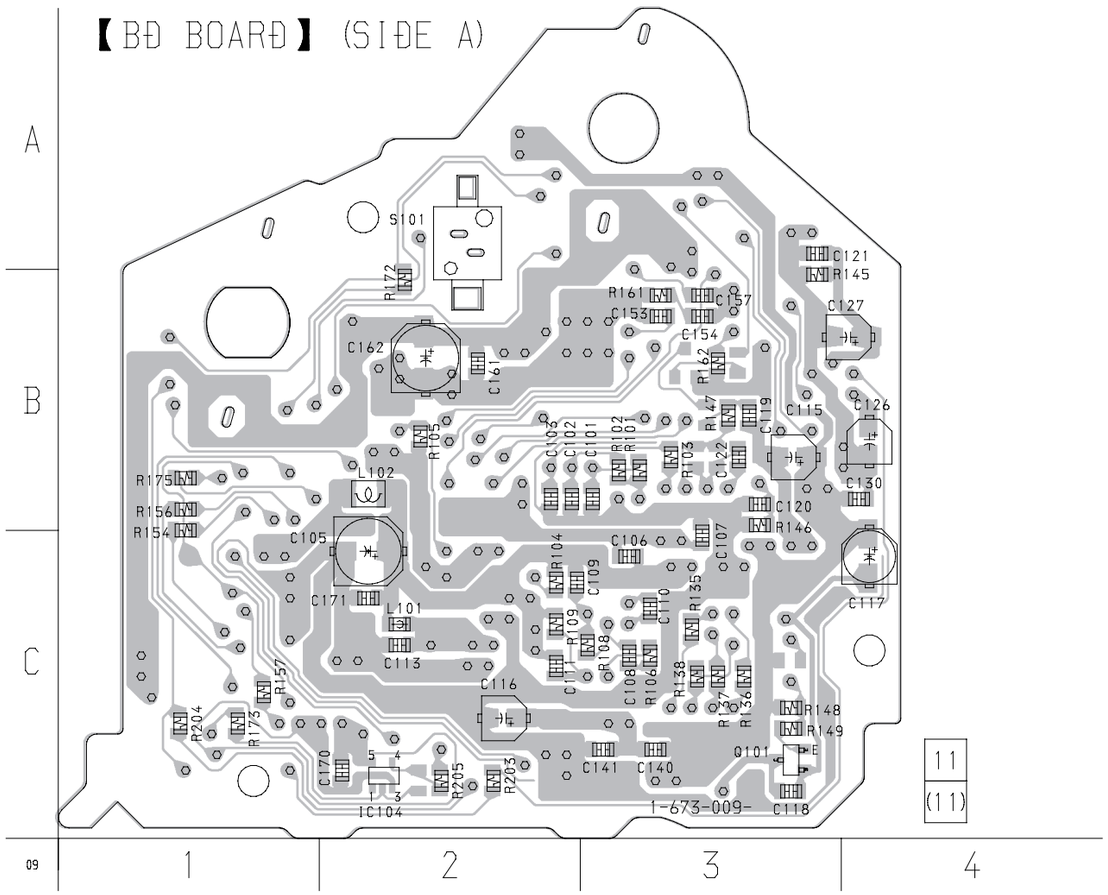


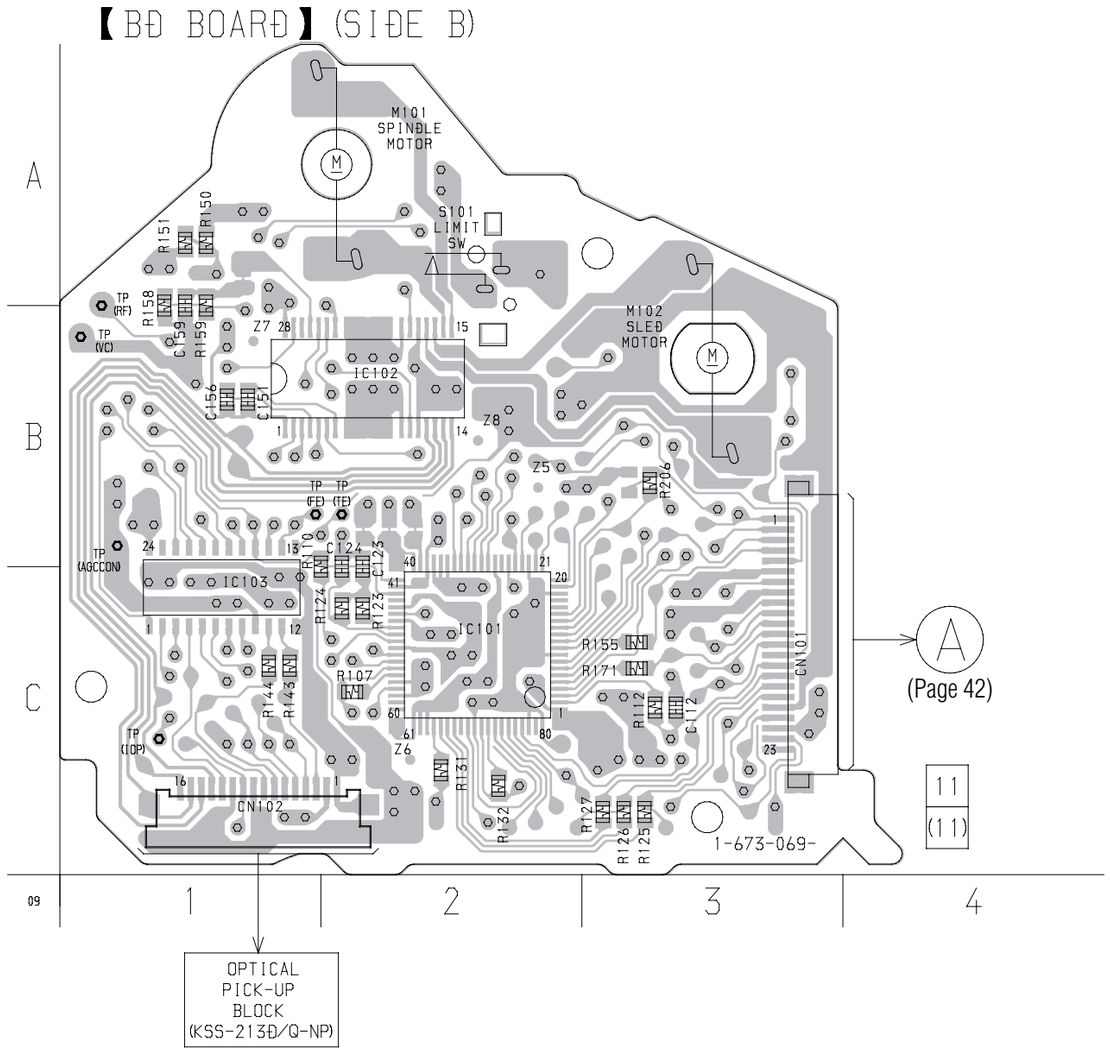
– PANEL (2/3) SECTION –



7-3. PRINTED WIRING BOARD – BD SECTION –

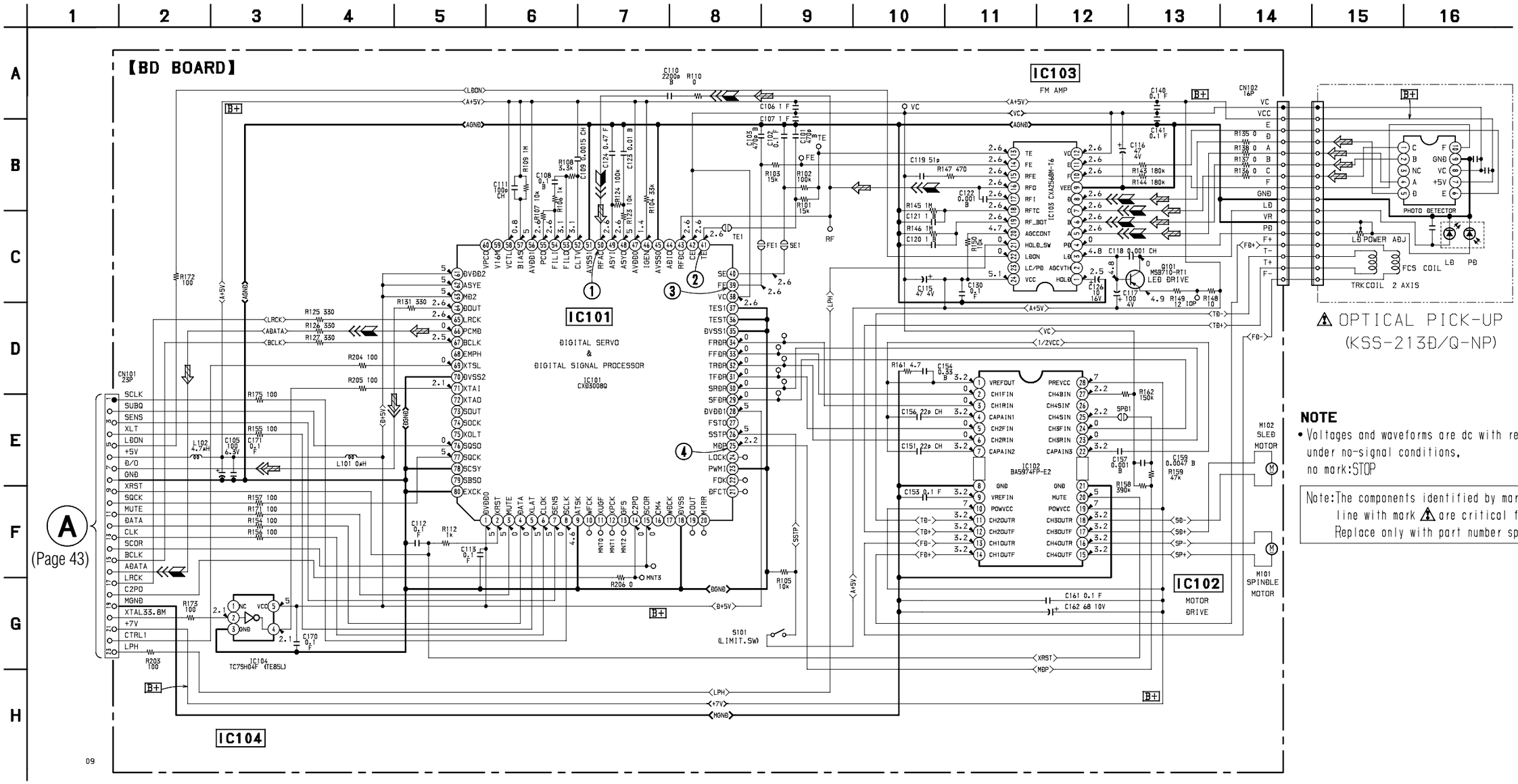
• See page 18 for Circuit Boards Location.





7-4. SCHEMATIC DIAGRAM – BD SECTION –

- See page 31 for Waveforms.
- See page 79 for IC Block Diagrams.
- See page 82 for IC Pin Functions.



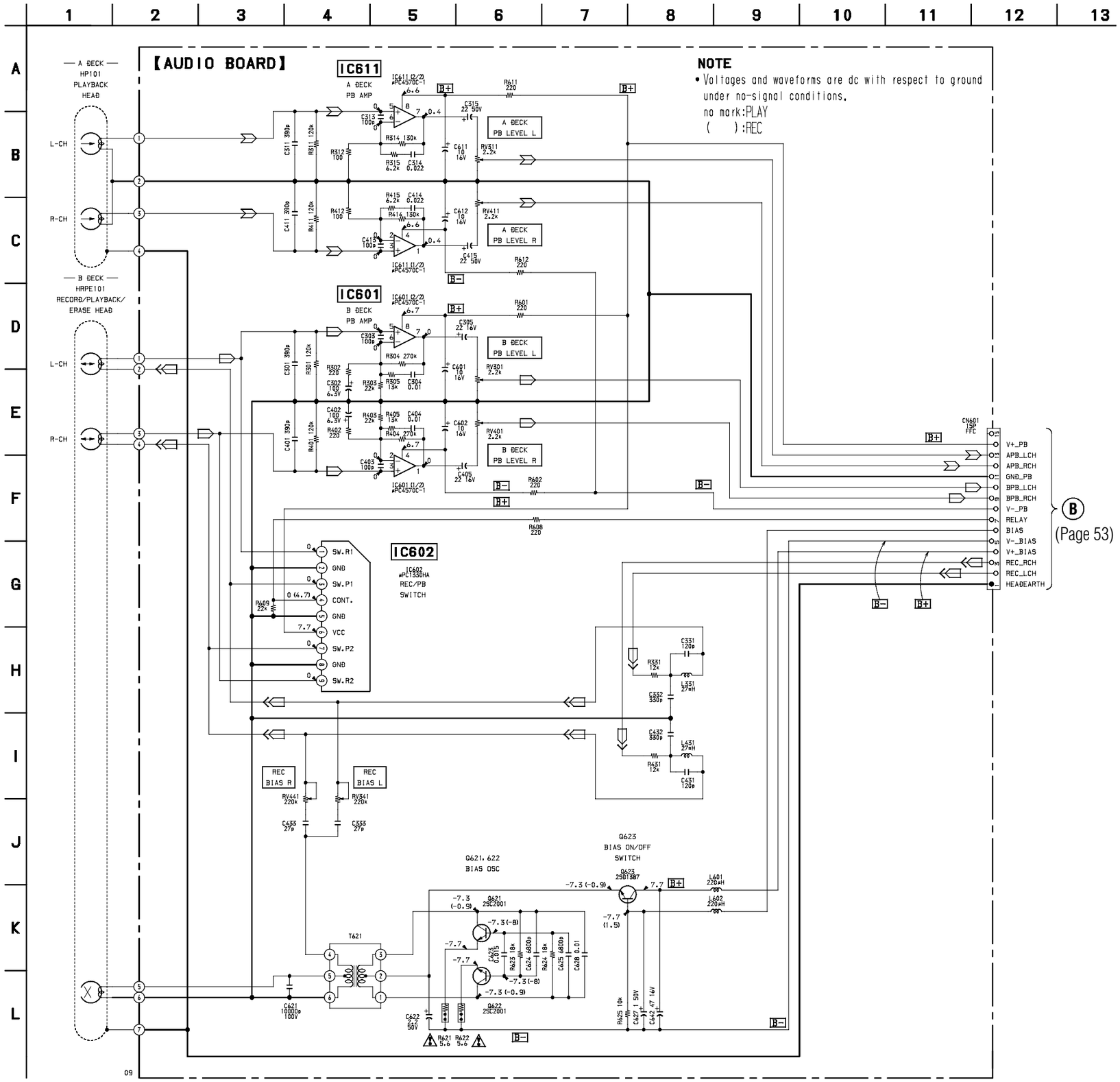
NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:STOP

Note:The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-5. SCHEMATIC DIAGRAM – DECK SECTION –

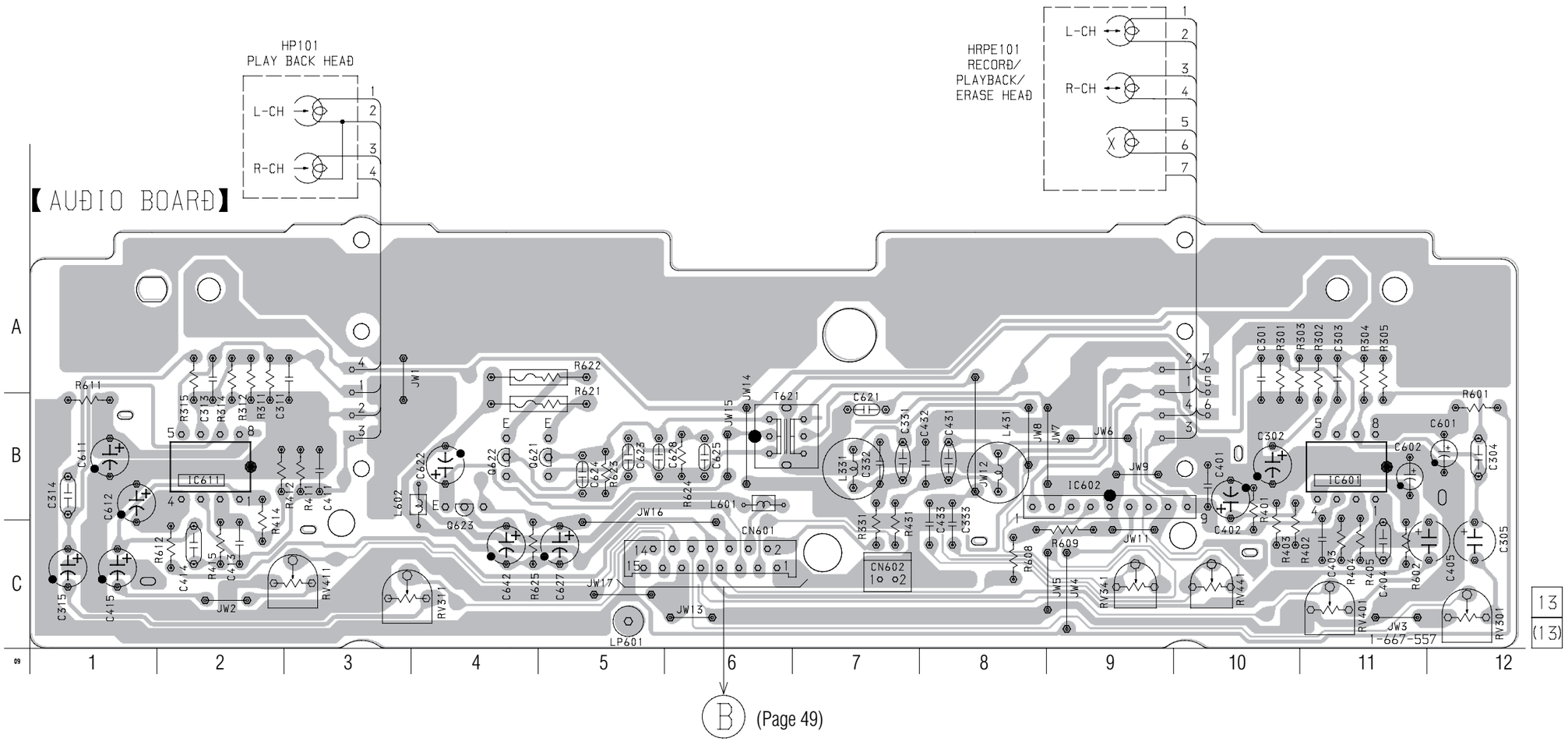
• See page 79 for IC Block Diagrams.



Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

7-6. PRINTED WIRING BOARD – DECK SECTION –

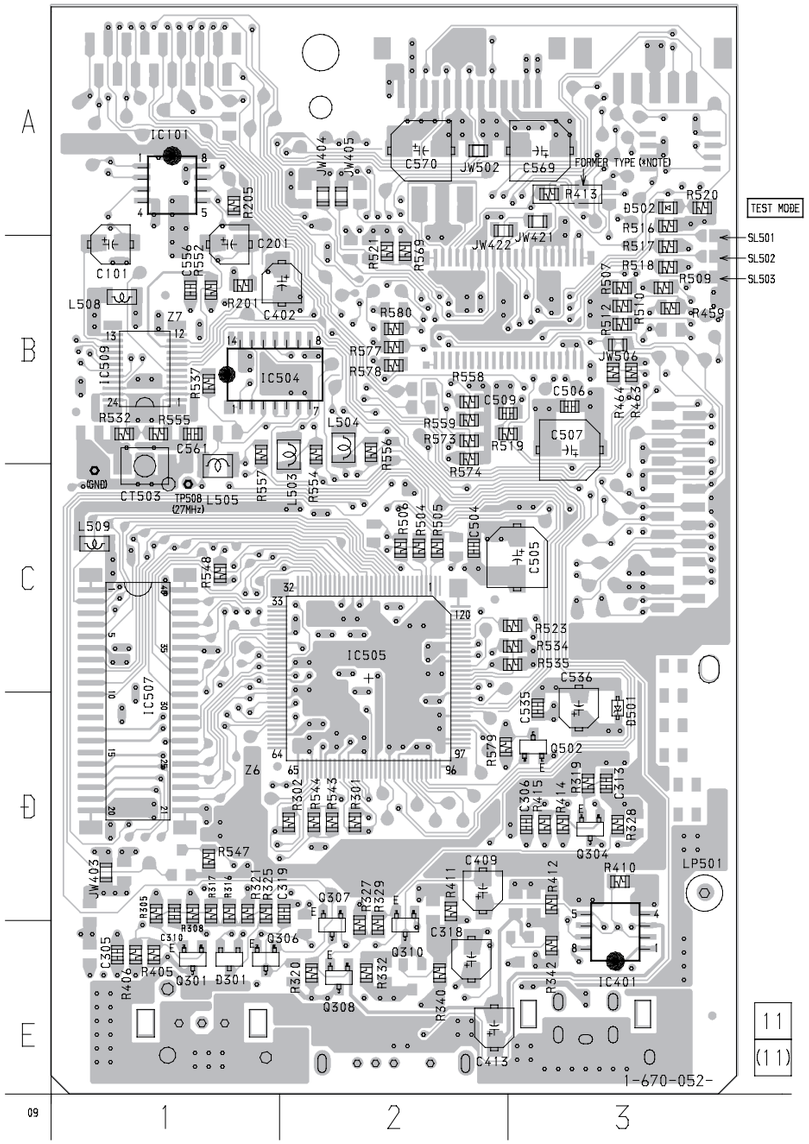
• See page 18 for Circuit Boards Location.



7-7. PRINTED WIRING BOARD – VIDEO SECTION –

• See page 18 for Circuit Boards Location.

【VIDEO BOARD】(SIDE A)

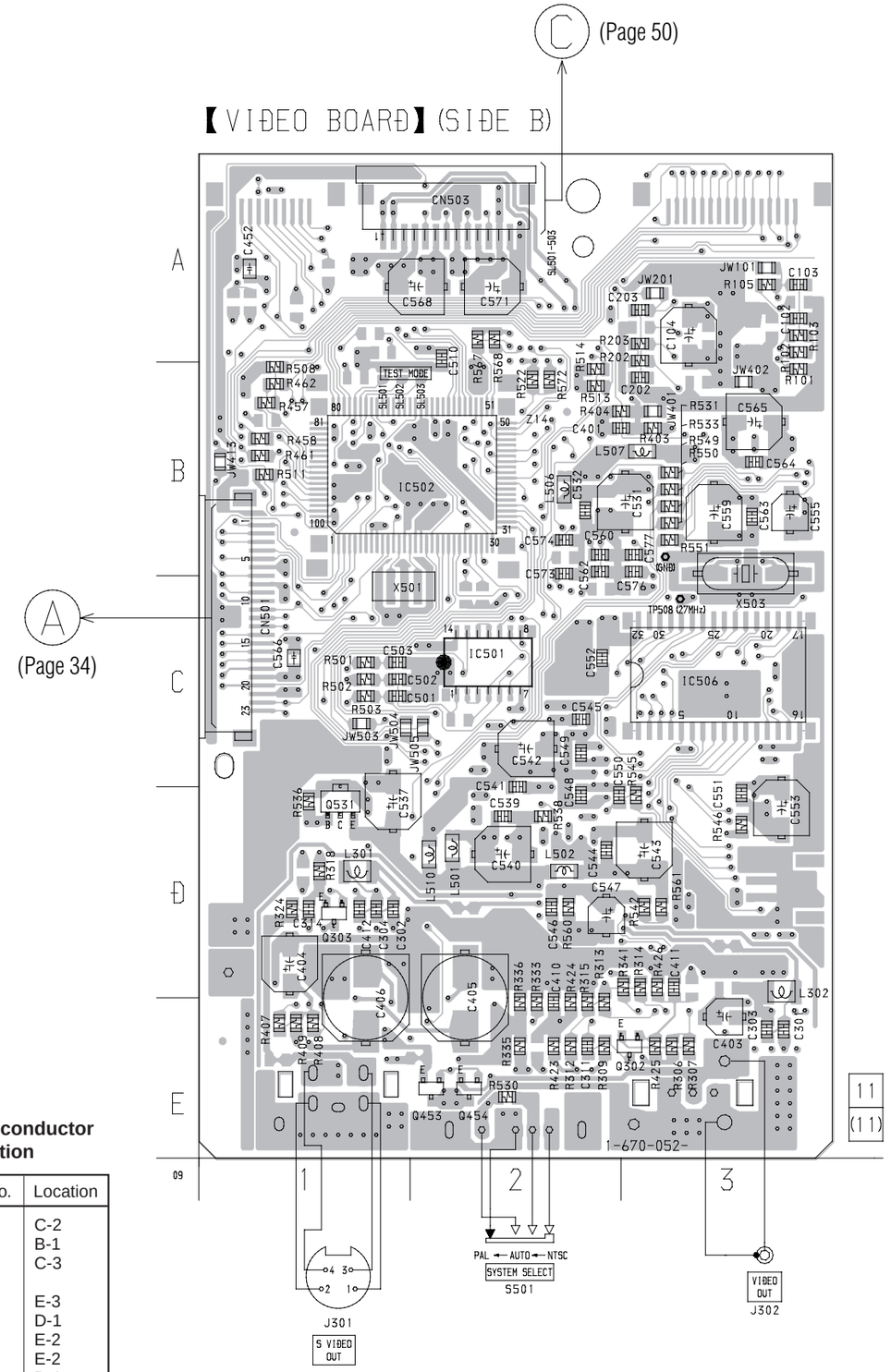


• **Semiconductor Location**

Ref. No.	Location
D301	E-1
D501	D-3
D502	A-3
IC101	A-1
IC401	E-3
IC504	A-1
IC505	C-2
IC507	C-1
IC509	B-1
Q301	E-1
Q304	D-3
Q306	E-1
Q307	E-2
Q308	E-2
Q310	E-2
Q502	D-3

(Page 50)

【VIDEO BOARD】(SIDE B)



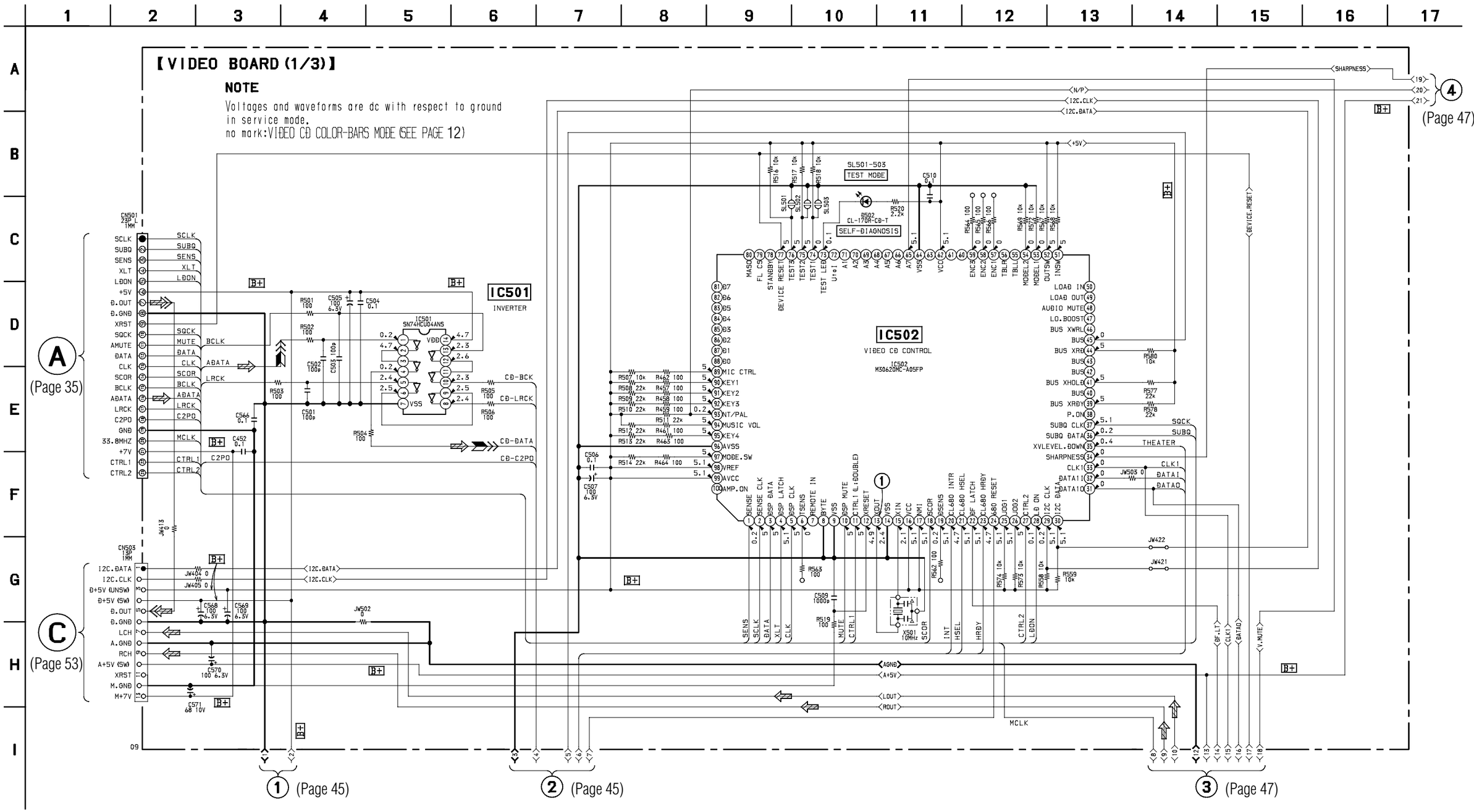
(Page 34)

• **Semiconductor Location**

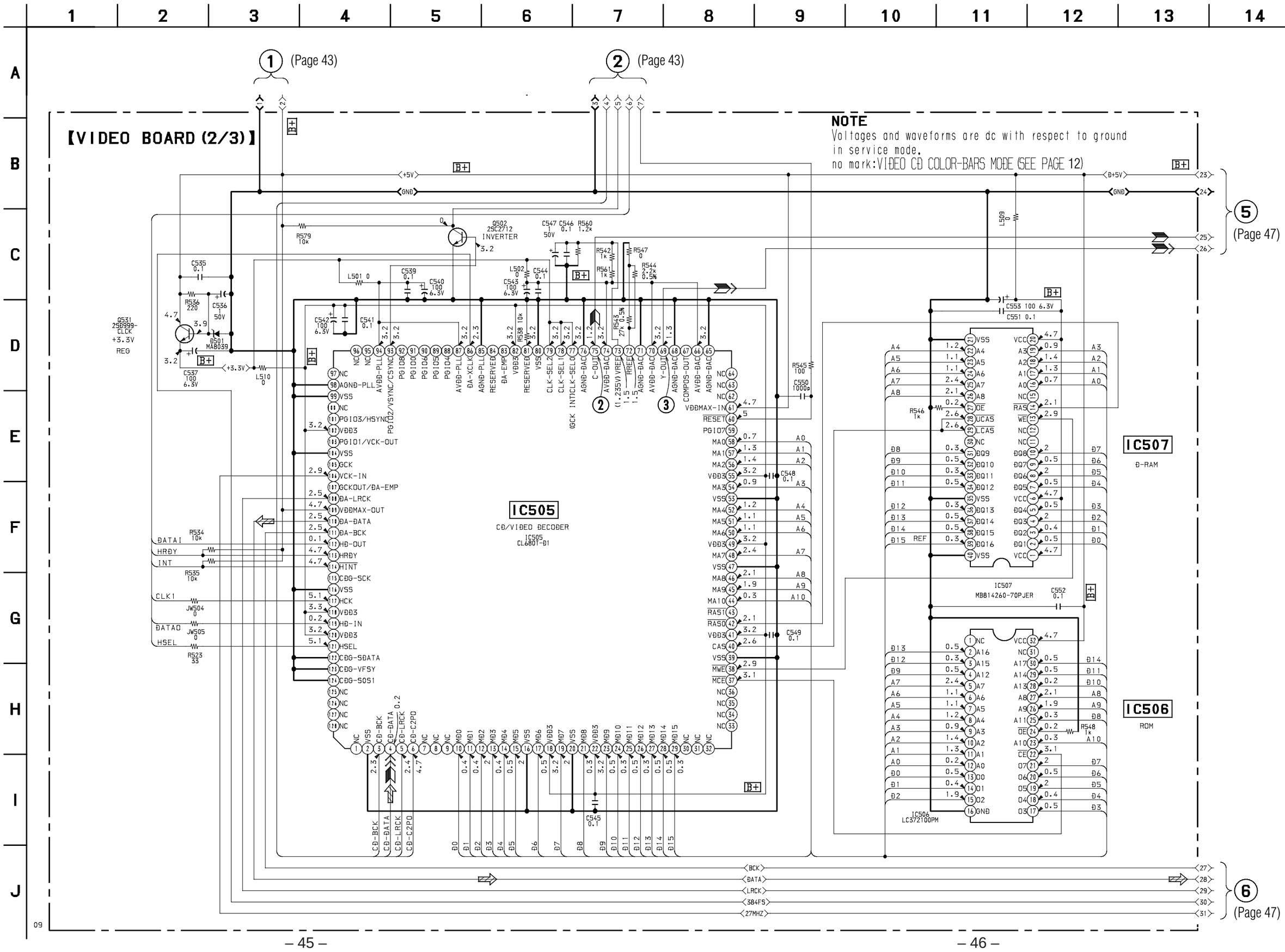
Ref. No.	Location
IC501	C-2
IC502	B-1
IC506	C-3
Q302	E-3
Q303	D-1
Q453	E-2
Q454	E-2
Q531	D-1

7-8. SCHEMATIC DIAGRAM – VIDEO (1/3) SECTION –

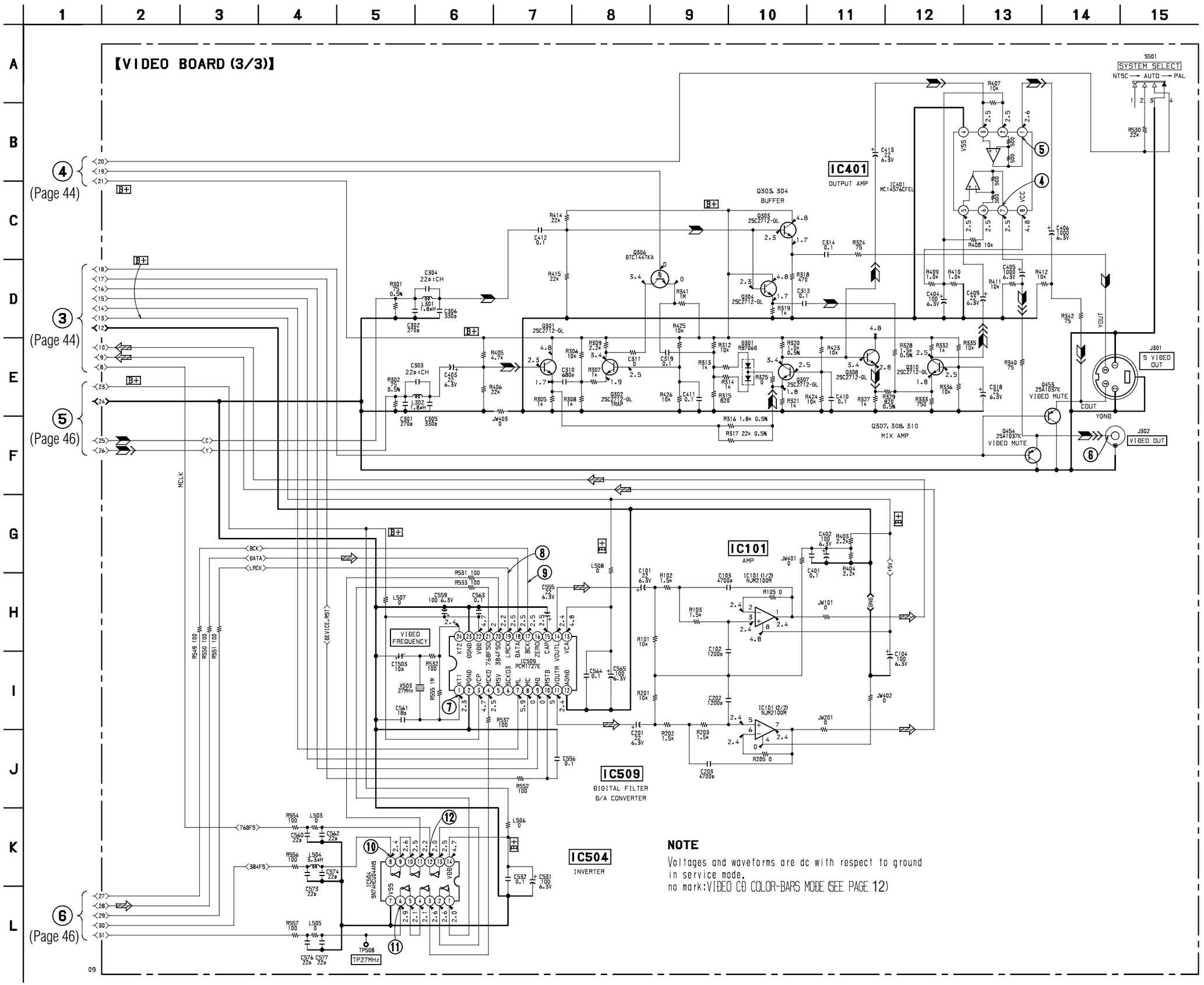
- See page 32 for Waveforms.
- See page 84 for IC Pin Functions.



7-9. SCHEMATIC DIAGRAM – VIDEO (2/3) SECTION – • See page 32 for Waveforms. • See page 41 for Printed Wiring Board. • See page 86 for IC Pin Functions.



7-10. SCHEMATIC DIAGRAM – VIDEO (3/3) SECTION – • See page 32 for Waveforms. • See page 41 for Printed Wiring Board. • See page 80 for IC Block Diagrams.



NOTE

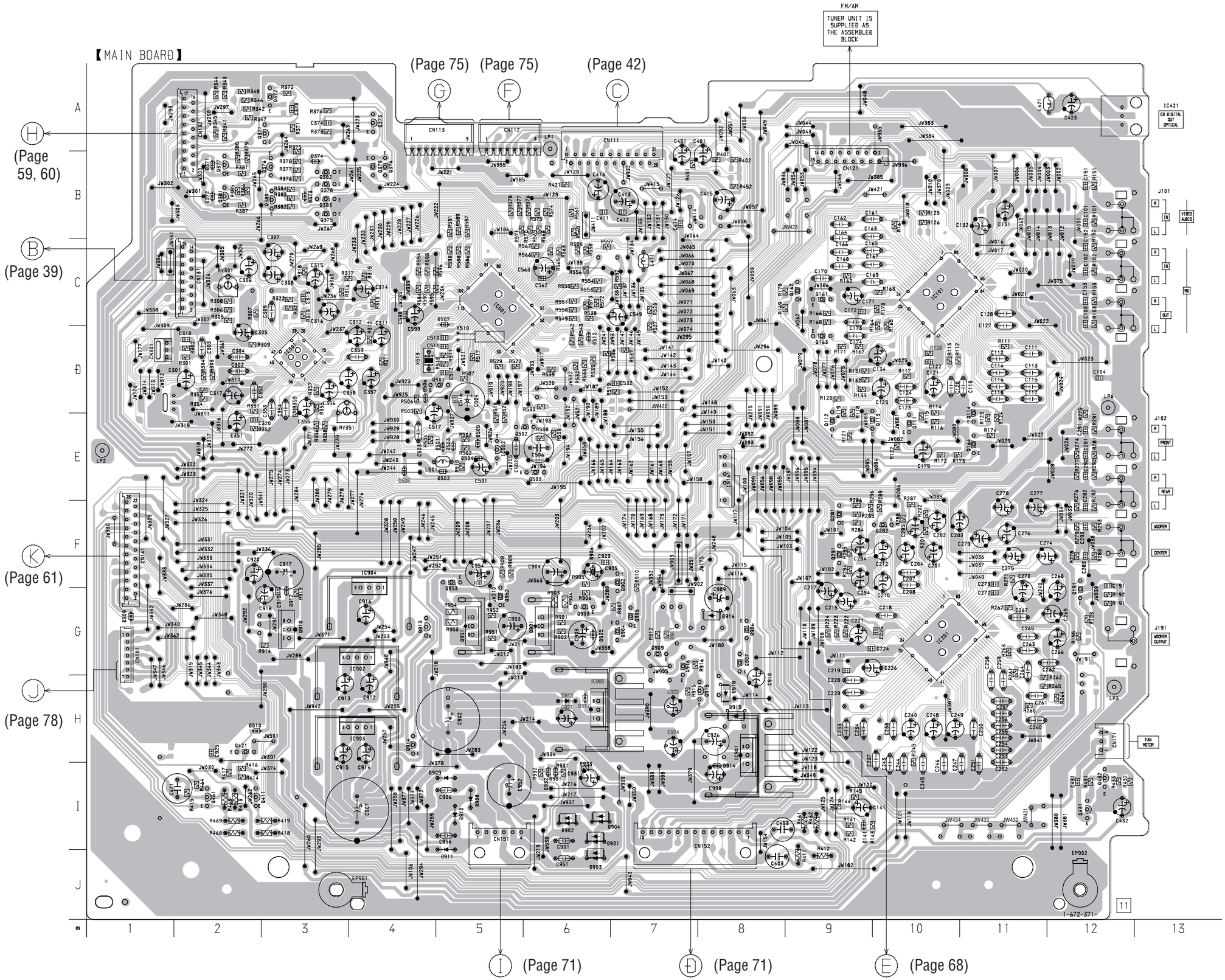
Voltages and waveforms are dc with respect to ground in service mode.
no mark:VIDEO CD COLOR-BARS MODE (SEE PAGE 12)

7-11. PRINTED WIRING BOARD – MAIN SECTION –

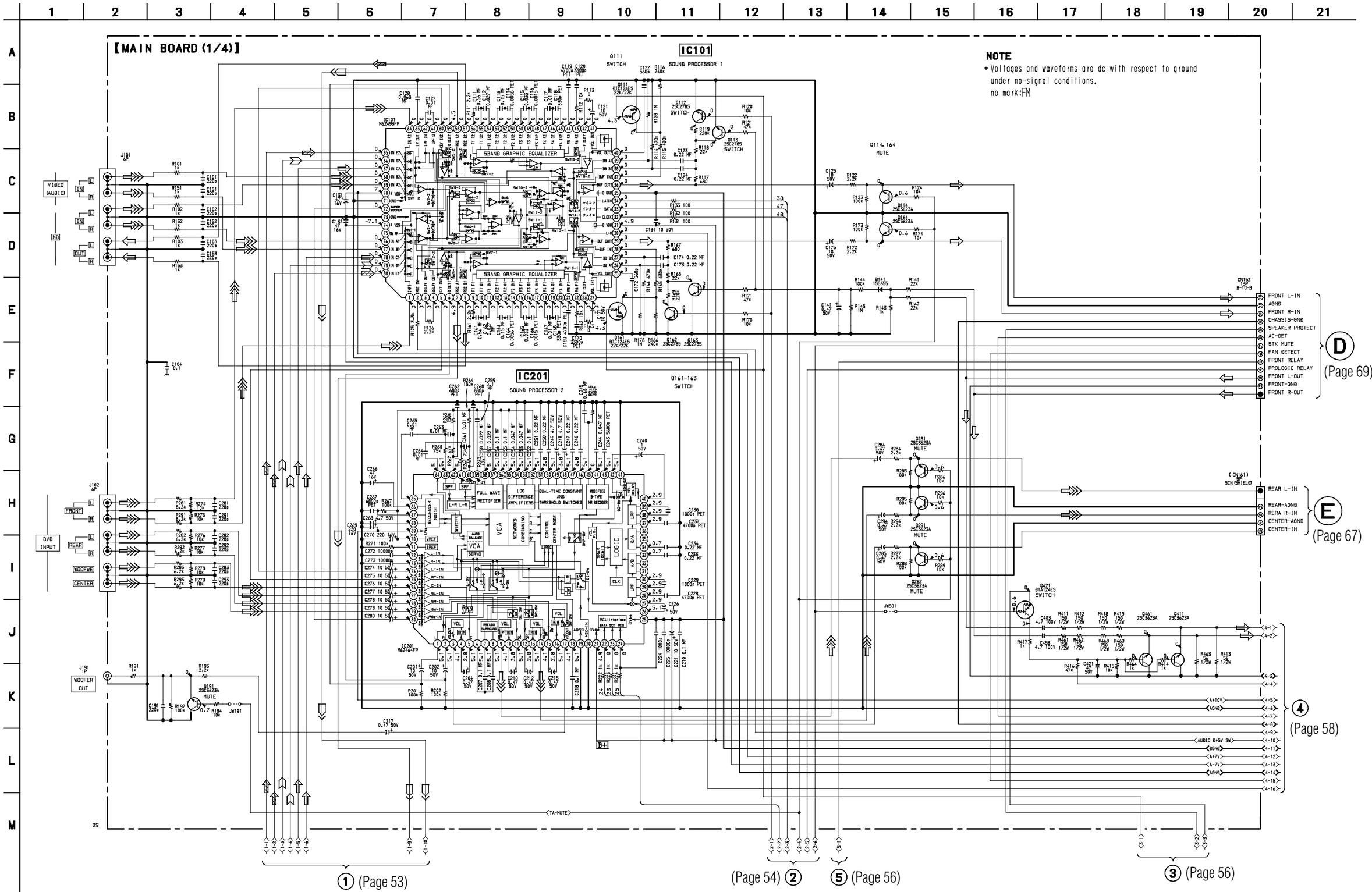
• See page 18 for Circuit Boards Location.

• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D141	I-9	Q113	E-10
D371	B-2	Q114	D-11
D372	B-2	Q161	C-9
D373	B-3	Q162	C-9
D374	B-3	Q163	D-9
D501	E-5	Q164	E-11
D502	E-5	Q191	F-12
D503	E-5	Q281	F-9
D504	E-5	Q282	F-10
D505	E-5	Q291	F-9
D506	D-4	Q371	A-3
D507	C-5	Q372	A-3
D508	E-4	Q373	A-4
D509	G-1	Q374	B-4
D510	H-2	Q375	B-3
D512	D-6	Q376	B-3
D901	I-6	Q377	B-2
D902	I-6	Q378	B-3
D903	J-6	Q379	B-4
D904	I-6	Q380	B-3
D905	G-6	Q381	B-2
D906	F-6	Q382	B-3
D908	I-5	Q383	B-3
D909	I-5	Q411	I-2
D910	I-5	Q421	H-2
D911	I-5	Q431	I-12
D912	G-3	Q432	I-12
D914	I-8	Q461	I-2
D915	H-8	Q501	D-5
D916	G-8	Q502	E-5
D918	H-8	Q503	E-6
D931	I-6	Q901	G-6
D932	I-6	Q902	F-7
		Q903	G-6
IC101	C-10	Q904	G-7
IC201	G-10	Q905	G-7
IC301	D-3	Q906	G-8
IC421	A-13	Q907	G-8
IC501	C-5	Q909	G-7
IC502	E-5	Q910	G-3
IC901	H-8	Q913	G-4
IC902	G-4	Q914	H-4
IC903	H-4	Q915	H-8
IC904	F-4	Q916	G-7
		Q951	G-5
Q111	E-10	Q952	G-5
Q112	E-9	Q953	F-5

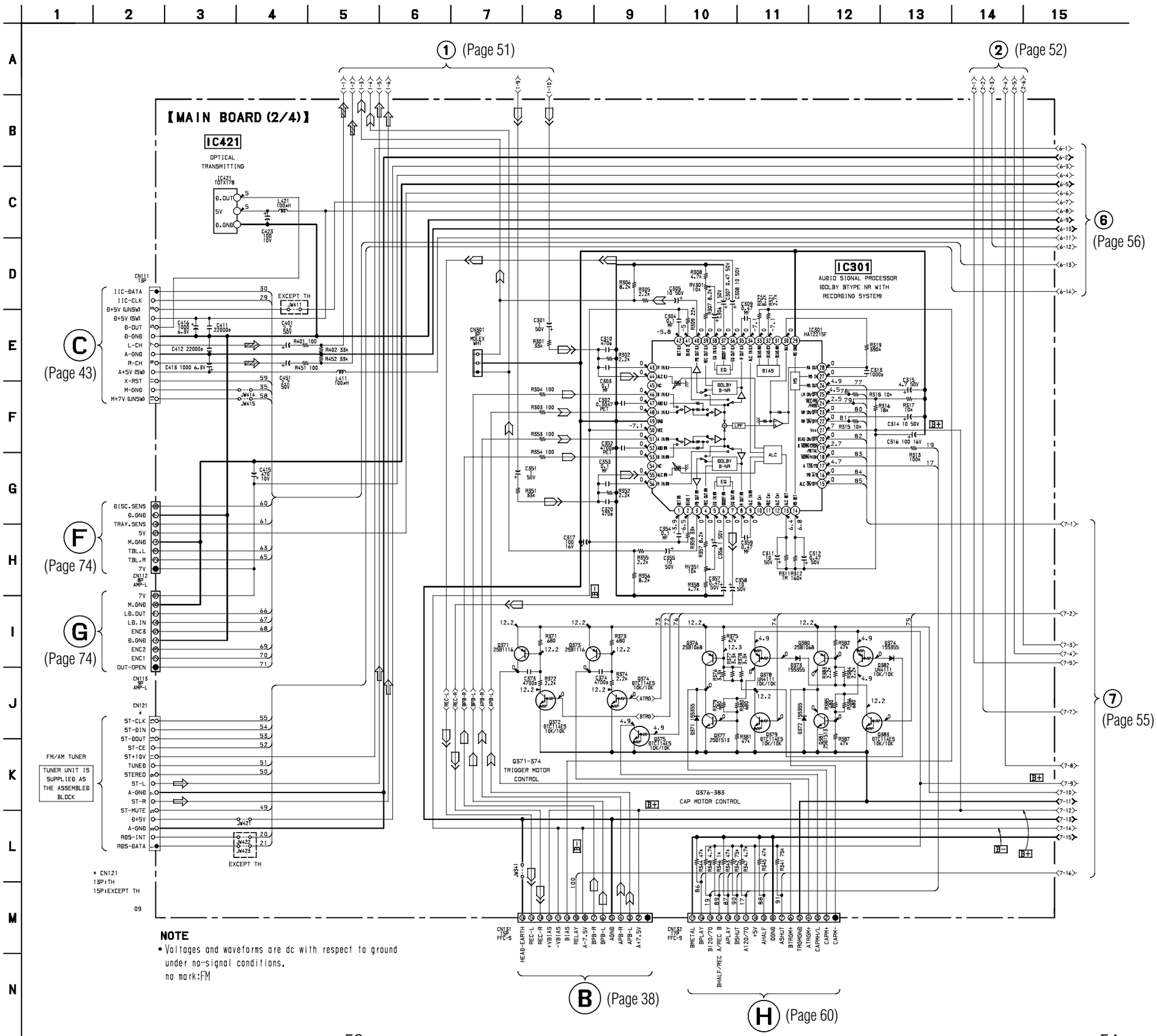


7-12. SCHEMATIC DIAGRAM – MAIN (1/4) SECTION –

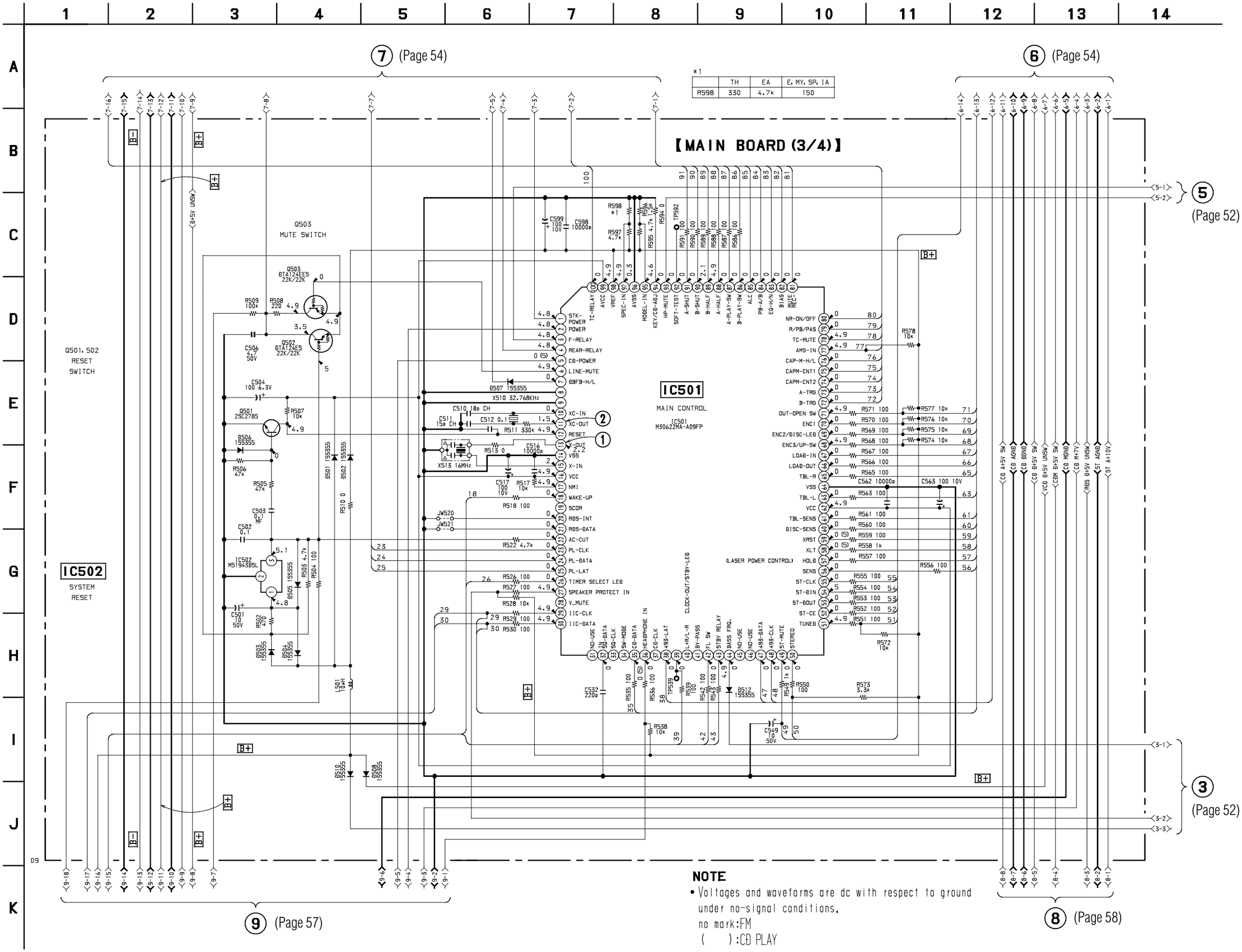


7-13. SCHEMATIC DIAGRAM – MAIN (2/4) SECTION –

• See page 49 for Printed Wiring Board.

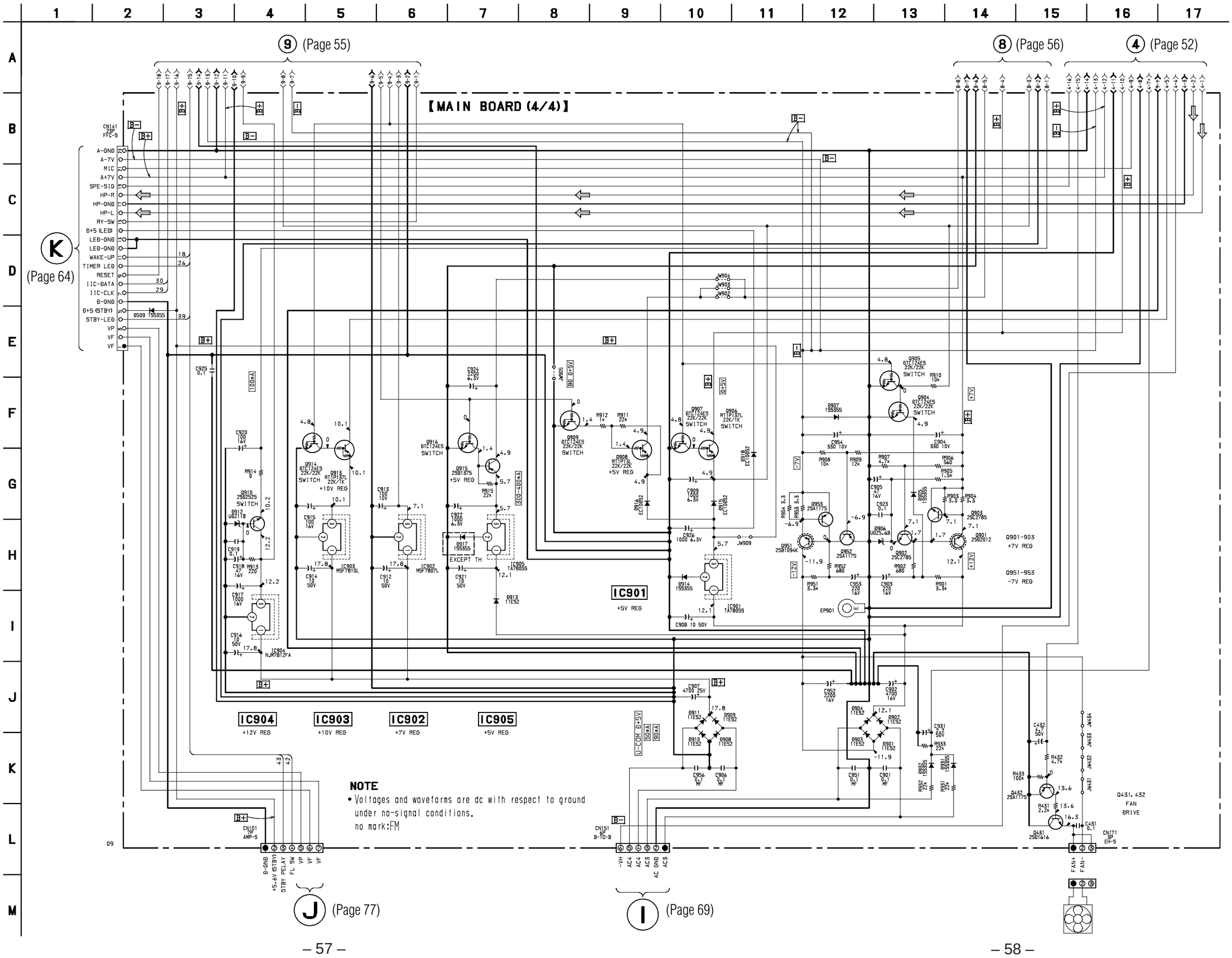


7-14. SCHEMATIC DIAGRAM – MAIN (3/4) SECTION – • See page 32 for Waveforms. • See page 49 for Printed Wiring Board. • See page 89 for IC Pin Functions.



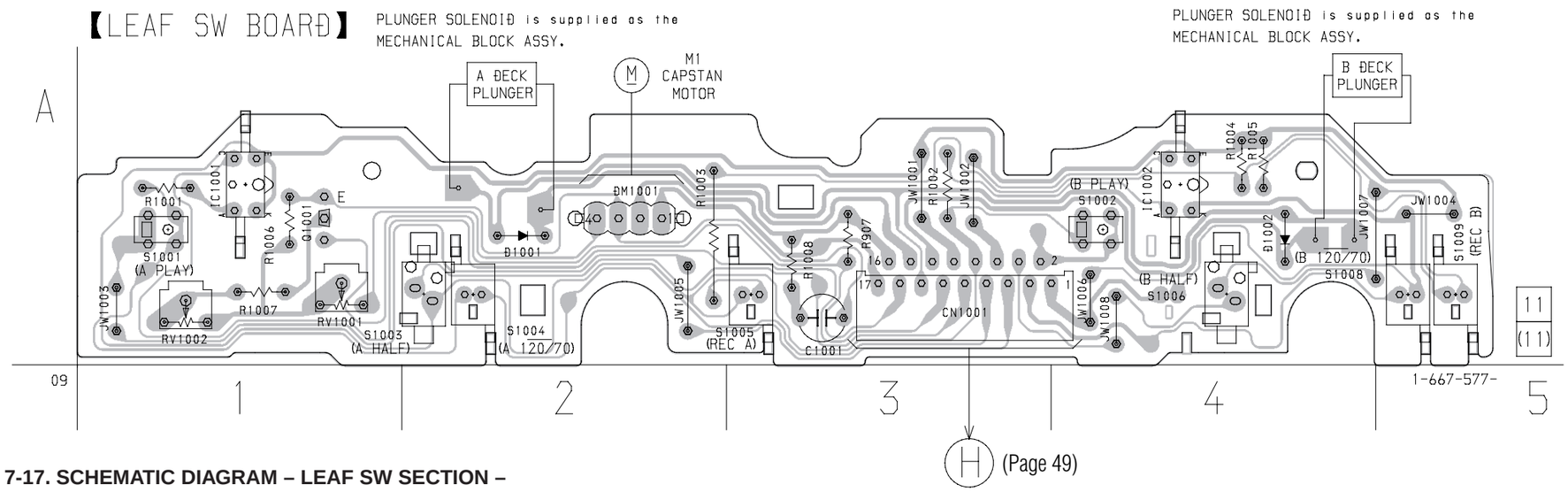
7-15. SCHEMATIC DIAGRAM – MAIN (4/4) SECTION –

• See page 49 for Printed Wiring Board.

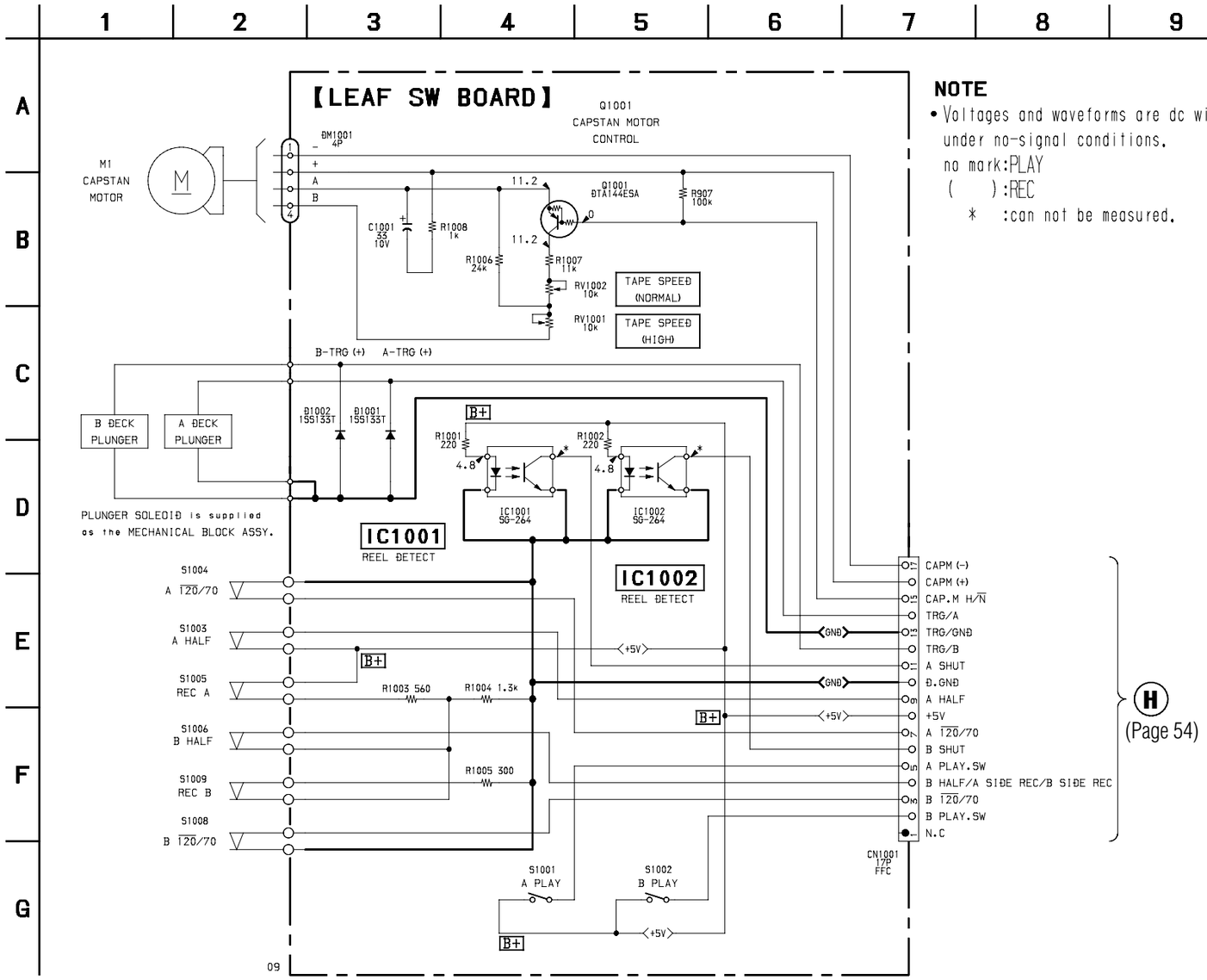


7-16. PRINTED WIRING BOARD – LEAF SW SECTION –

• See page 18 for Circuit Boards Location.



7-17. SCHEMATIC DIAGRAM – LEAF SW SECTION –



NOTE

• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark:PLAY
( ):REC
* :can not be measured.

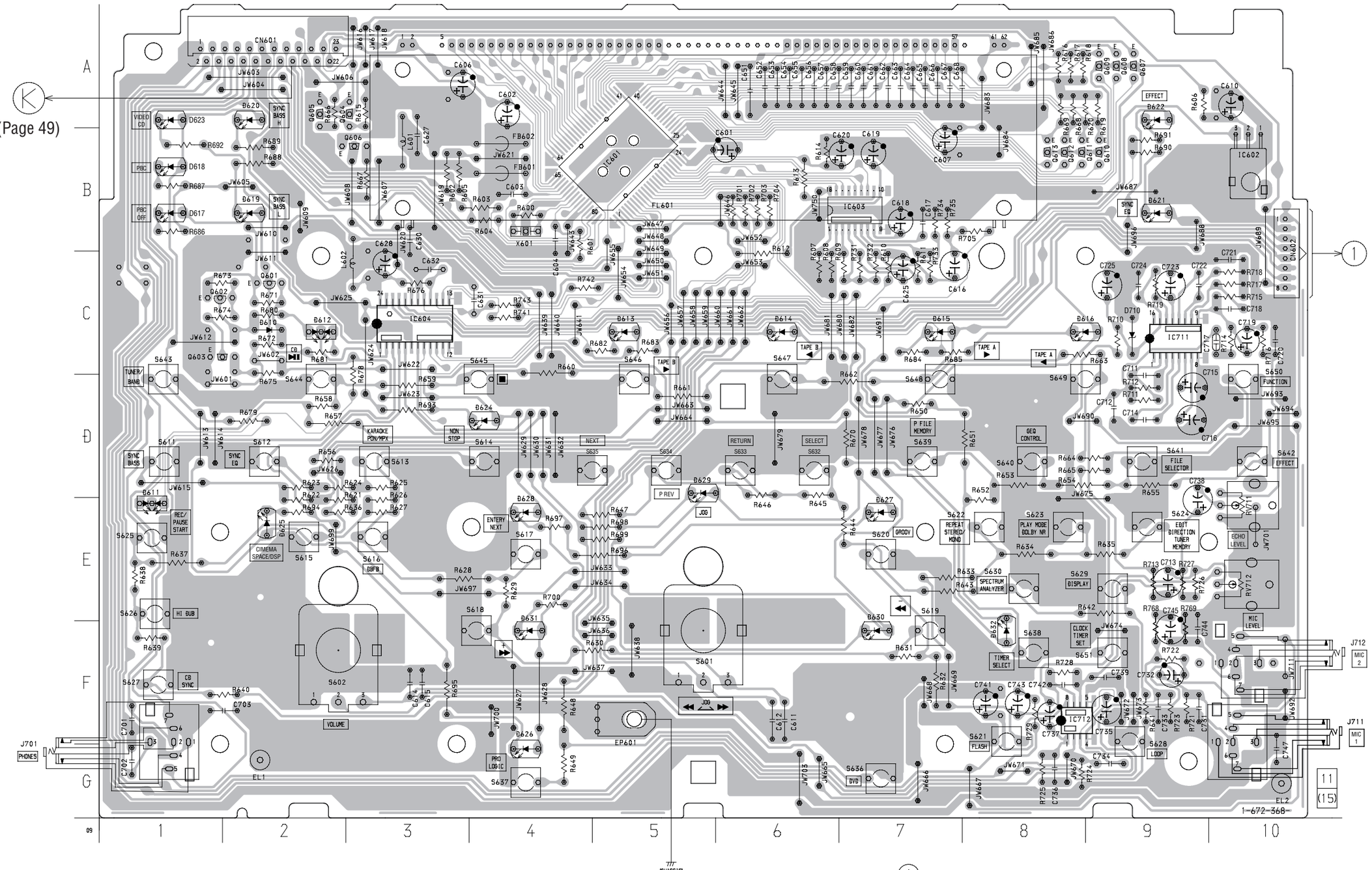
7-18. PRINTED WIRING BOARD – PANEL SECTION –

• See page 18 for Circuit Boards Location.

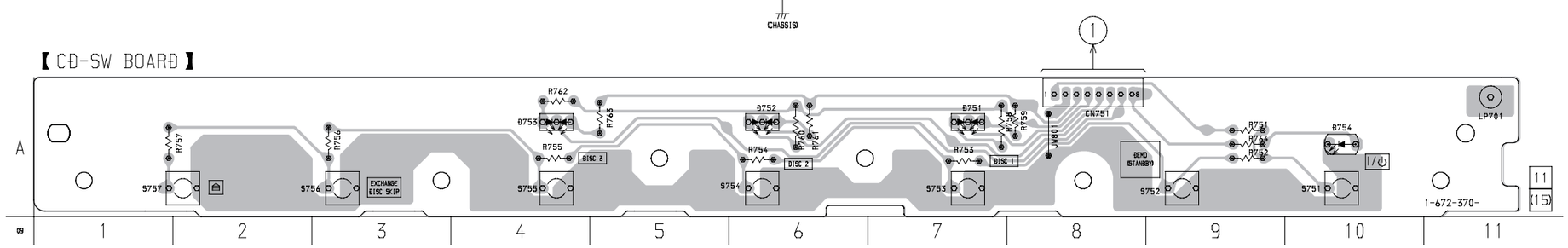
• **Semiconductor Location**

Ref. No.	Location
D610	C-2
D611	D-1
D612	C-2
D613	C-5
D614	C-6
D615	C-7
D616	C-9
D617	B-1
D618	B-1
D619	B-2
D620	A-2
D621	B-9
D622	A-9
D623	A-1
D624	D-4
D625	E-2
D626	F-4
D627	E-7
D628	E-4
D629	D-5
D630	E-7
D631	E-4
D632	F-8
D710	C-9
IC601	B-5
IC602	B-10
IC603	B-7
IC604	C-3
IC711	C-9
IC712	F-8
Q601	C-2
Q602	C-1
Q603	C-1
Q604	A-2
Q605	A-2
Q606	B-3
Q607	A-9
Q608	A-9
Q609	A-9
Q610	B-9
Q611	B-9
Q612	B-8
Q613	B-8

【PANEL BOARD】

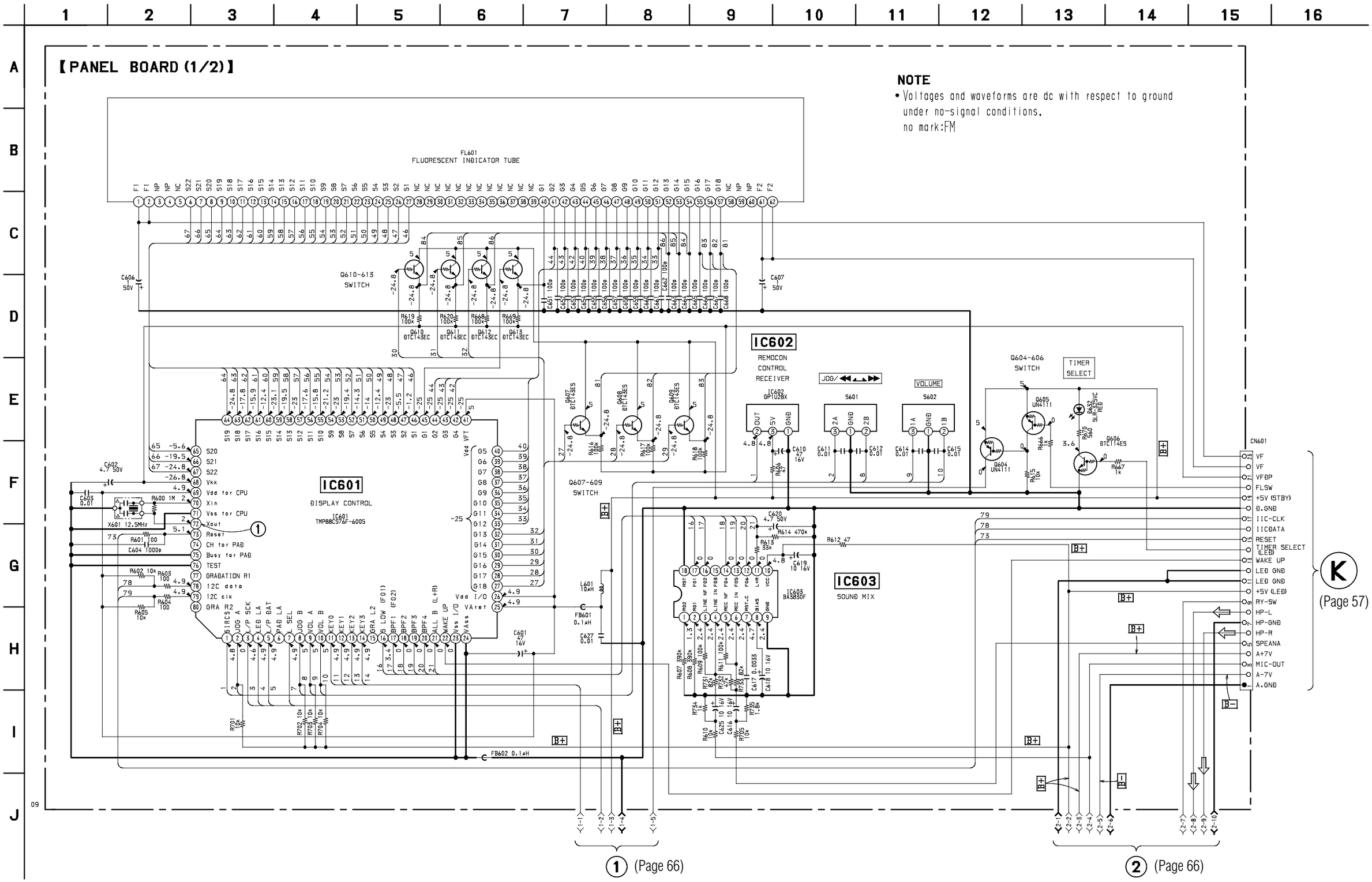


【CD-SW BOARD】



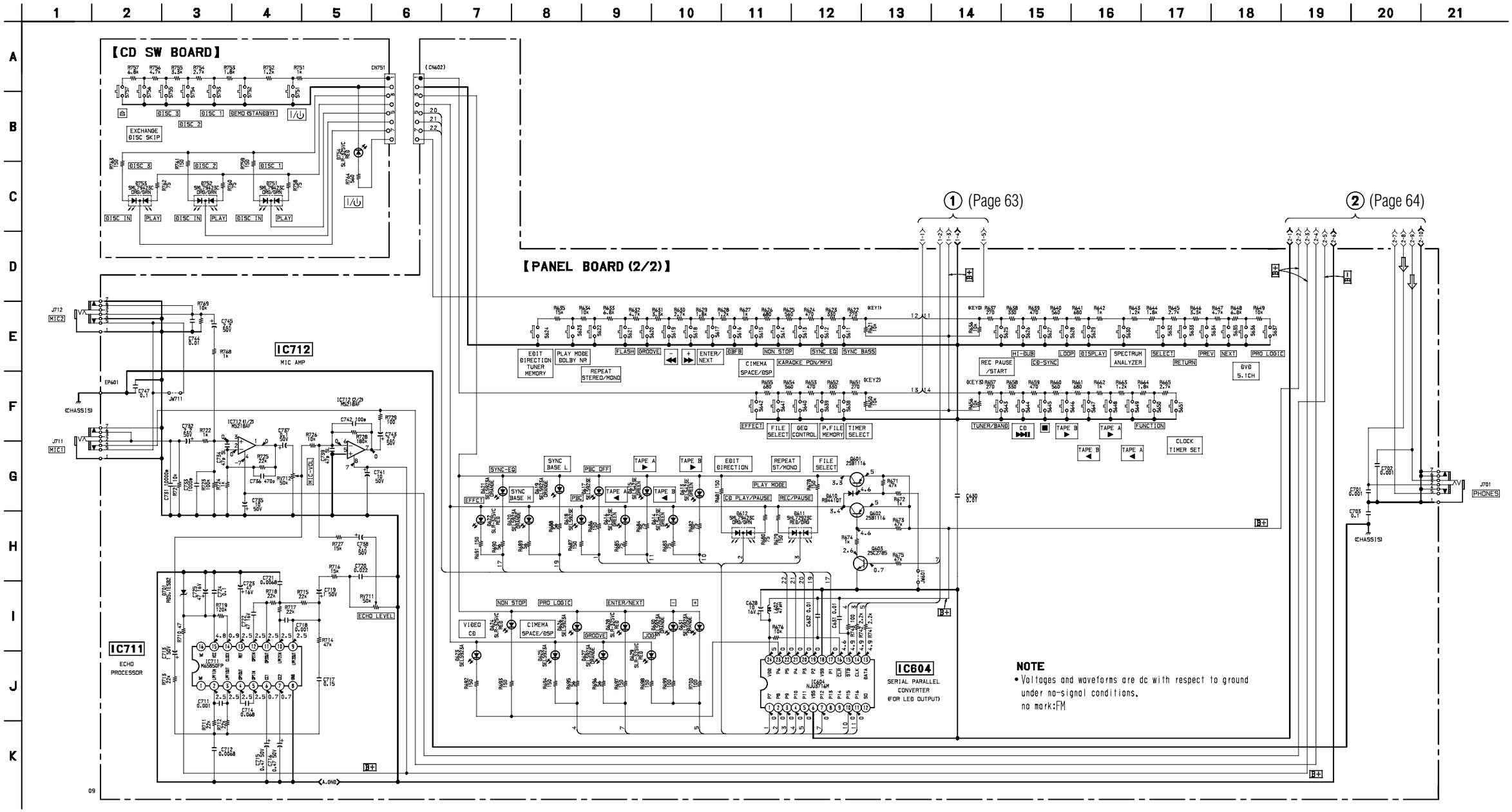
7-19. SCHEMATIC DIAGRAM – PANEL (1/2) SECTION –

• See page 81 for IC Block Diagrams.

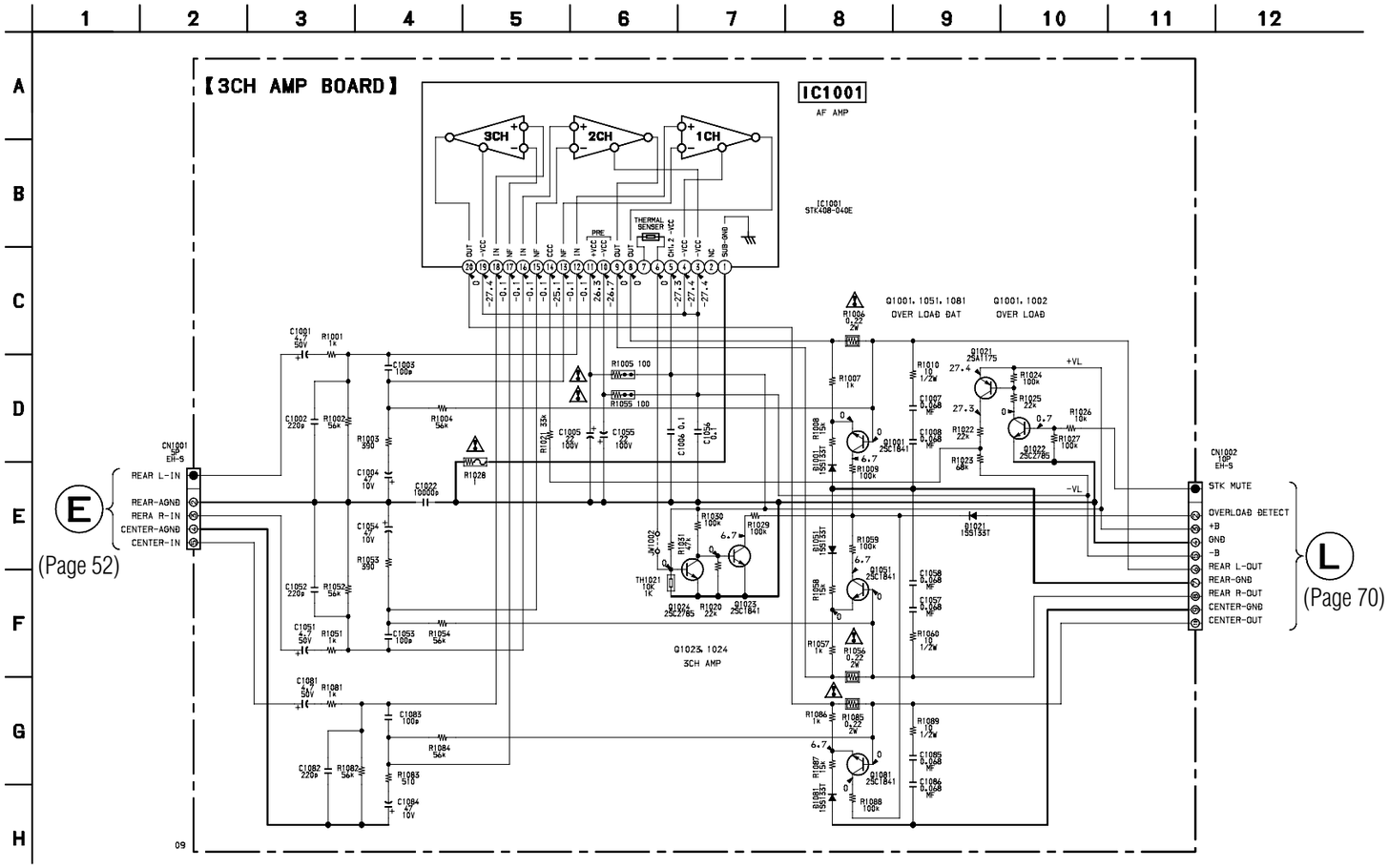


7-20. SCHEMATIC DIAGRAM – PANEL (2/2) SECTION –

- See page 32 for Waveforms.
- See page 61 for Printed Wiring Board.
- See page 80 for IC Block Diagrams.
- See page 91 for IC Pin Functions.

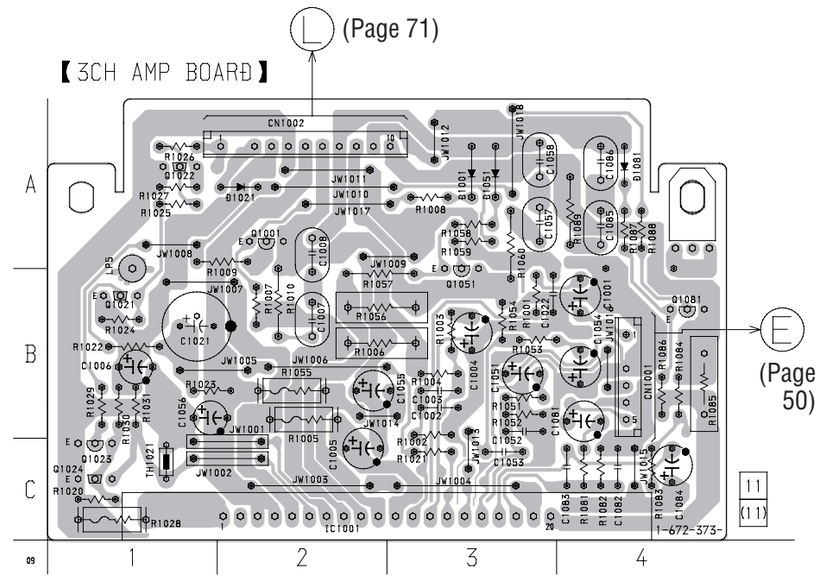


7-21. SCHEMATIC DIAGRAM – SURROUND SECTION –



7-22. PRINTED WIRING BOARD – SURROND SECTION –

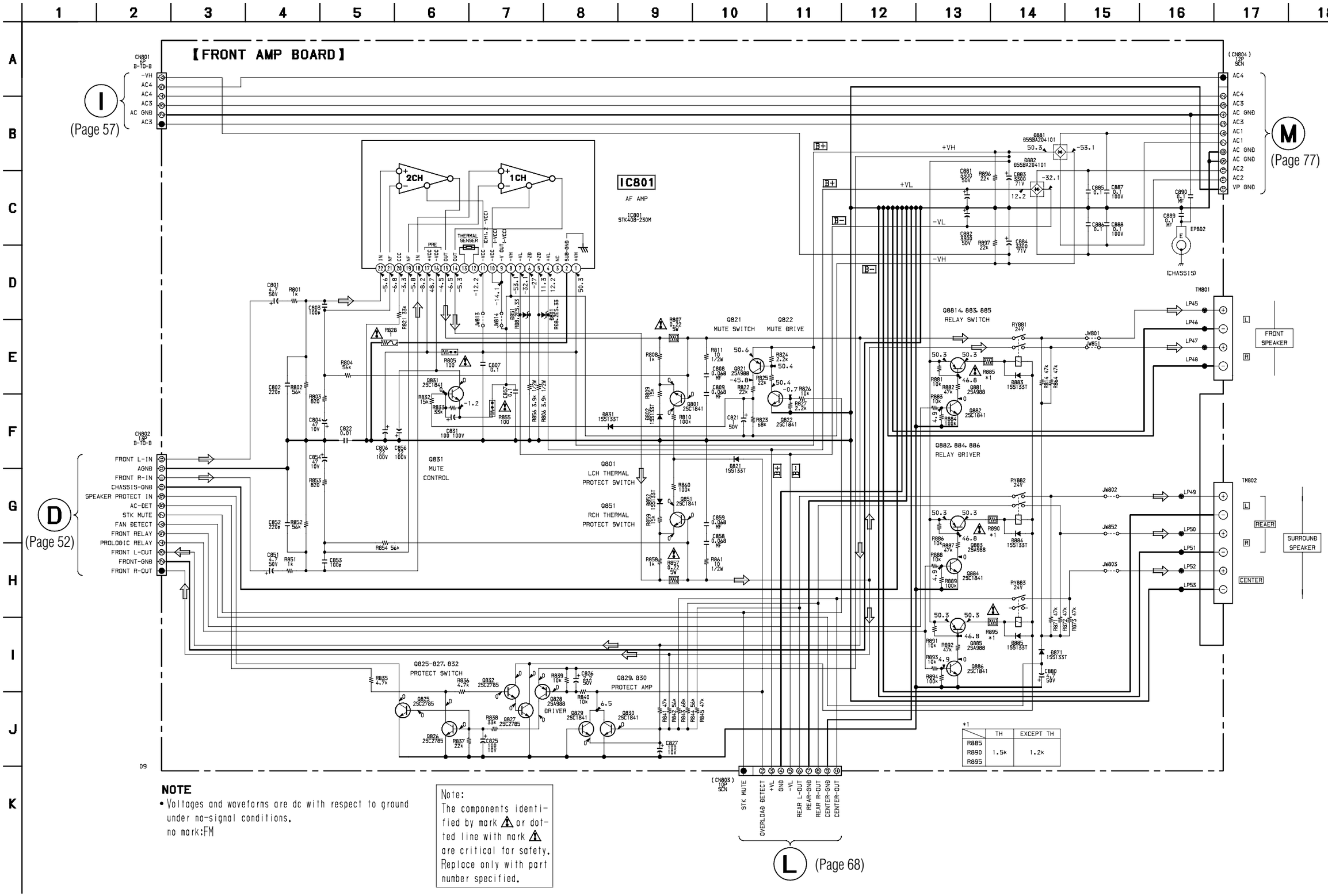
• **See page 18 for Circuit Boards Location.**



• **Semiconductor Location**

Ref. No.	Location
D1001	A-3
D1021	A-2
D1051	A-3
D1081	A-4
IC1001	C-2
Q1001	A-2
Q1021	B-1
Q1022	A-1
Q1023	C-1
Q1024	C-1
Q1051	B-3
Q1081	B-4

7-23. SCHEMATIC DIAGRAM – FRONT AMP SECTION –



*1	TH	EXCEPT TH
R885	1.5k	1.2k
R890		
R895		

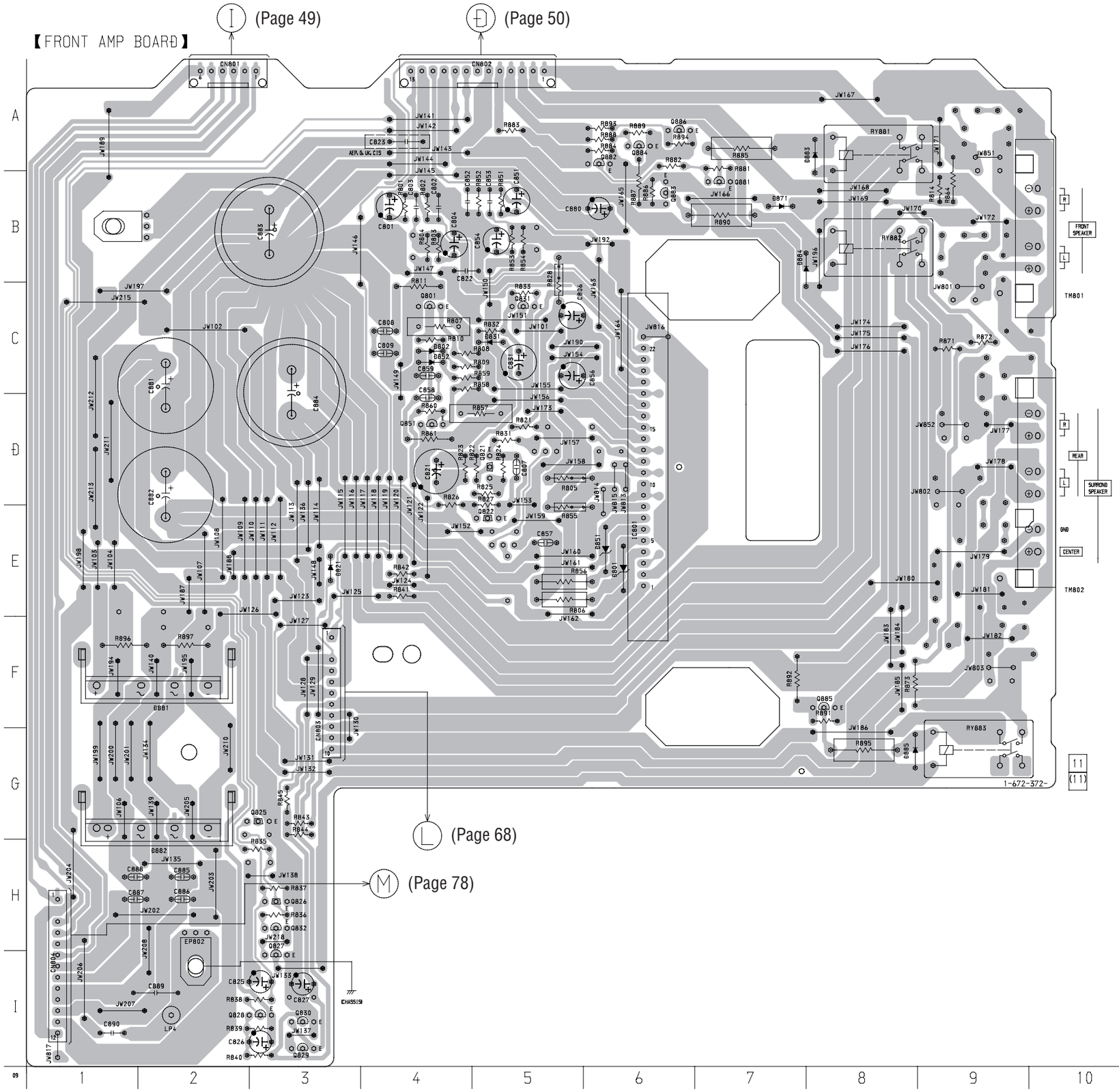
NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:FM

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

7-24. PRINTED WIRING BOARD – FRONT AMP SECTION –

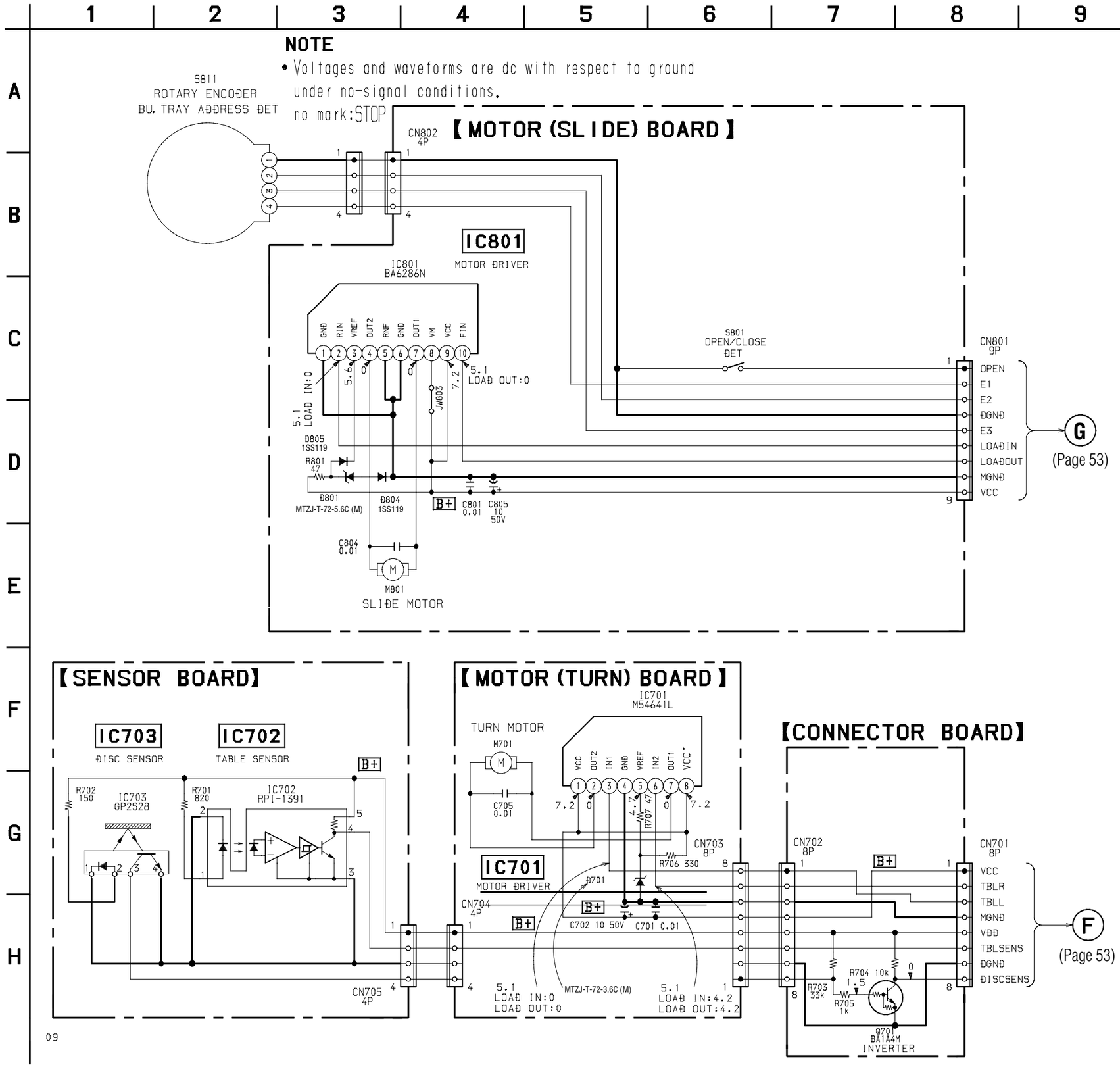
• See page 18 for Circuit Boards Location.



• **Semiconductor Location**

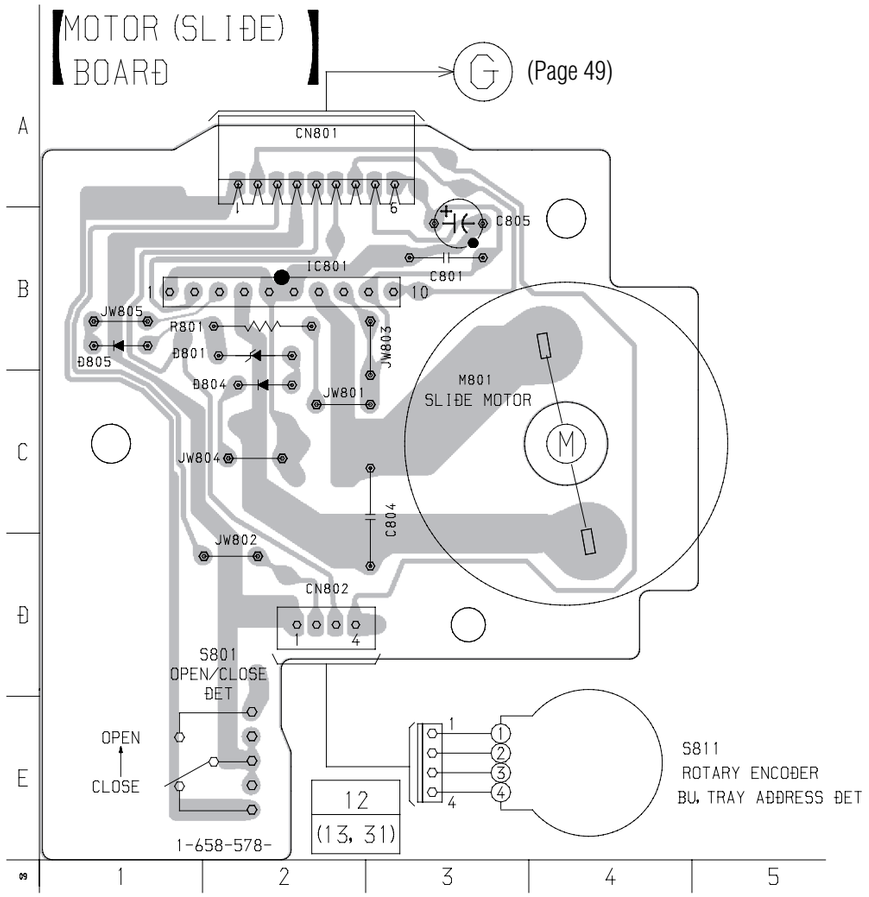
Ref. No.	Location
D801	E-6
D802	C-4
D821	E-3
D831	C-5
D851	E-6
D852	C-4
D871	B-7
D881	F-2
D882	G-2
D883	A-8
D884	B-8
D885	G-8
IC801	E-6
Q801	C-4
Q821	D-5
Q822	E-5
Q825	G-3
Q826	H-3
Q827	H-3
Q828	I-2
Q829	I-3
Q830	I-3
Q831	C-5
Q851	D-4
Q881	B-7
Q882	A-6
Q883	B-6
Q884	A-6
Q885	F-8
Q886	A-6

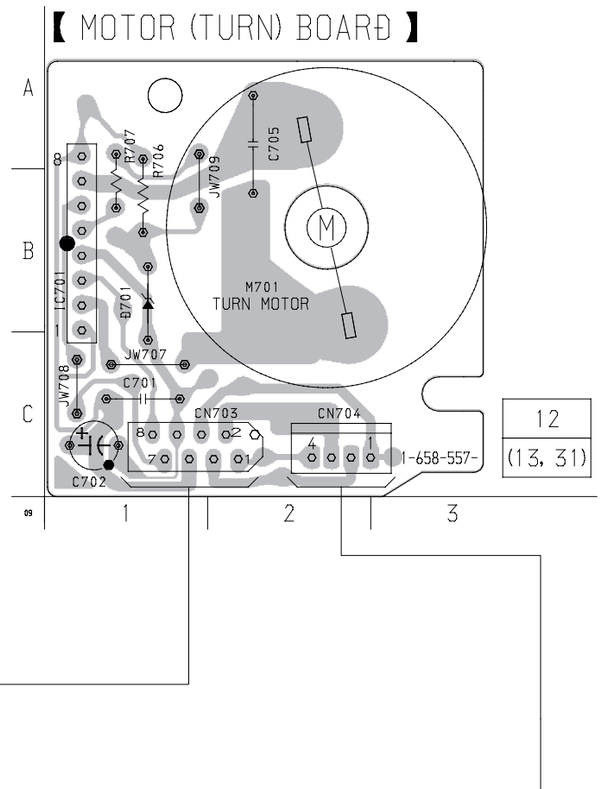
7-25. SCHEMATIC DIAGRAM – CD MOTOR SECTION –

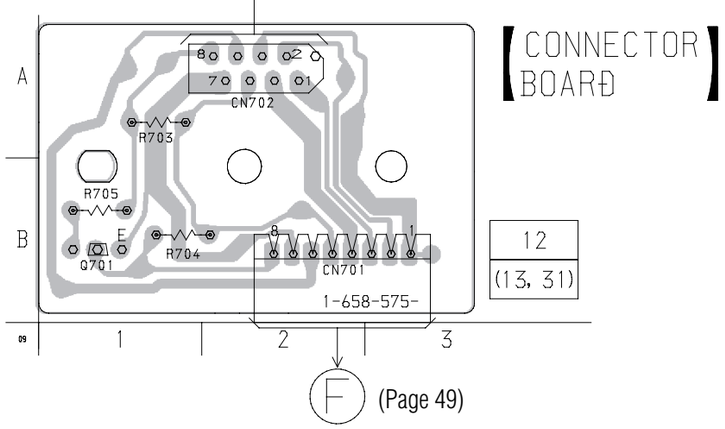


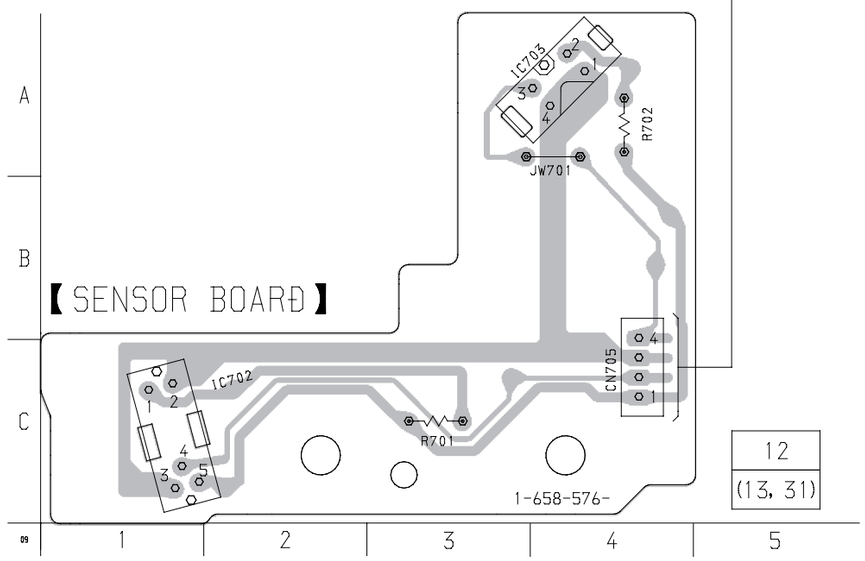
7-26. PRINTED WIRING BOARD – CD MOTOR SECTION –

• See page XX for Circuit Boards Location.

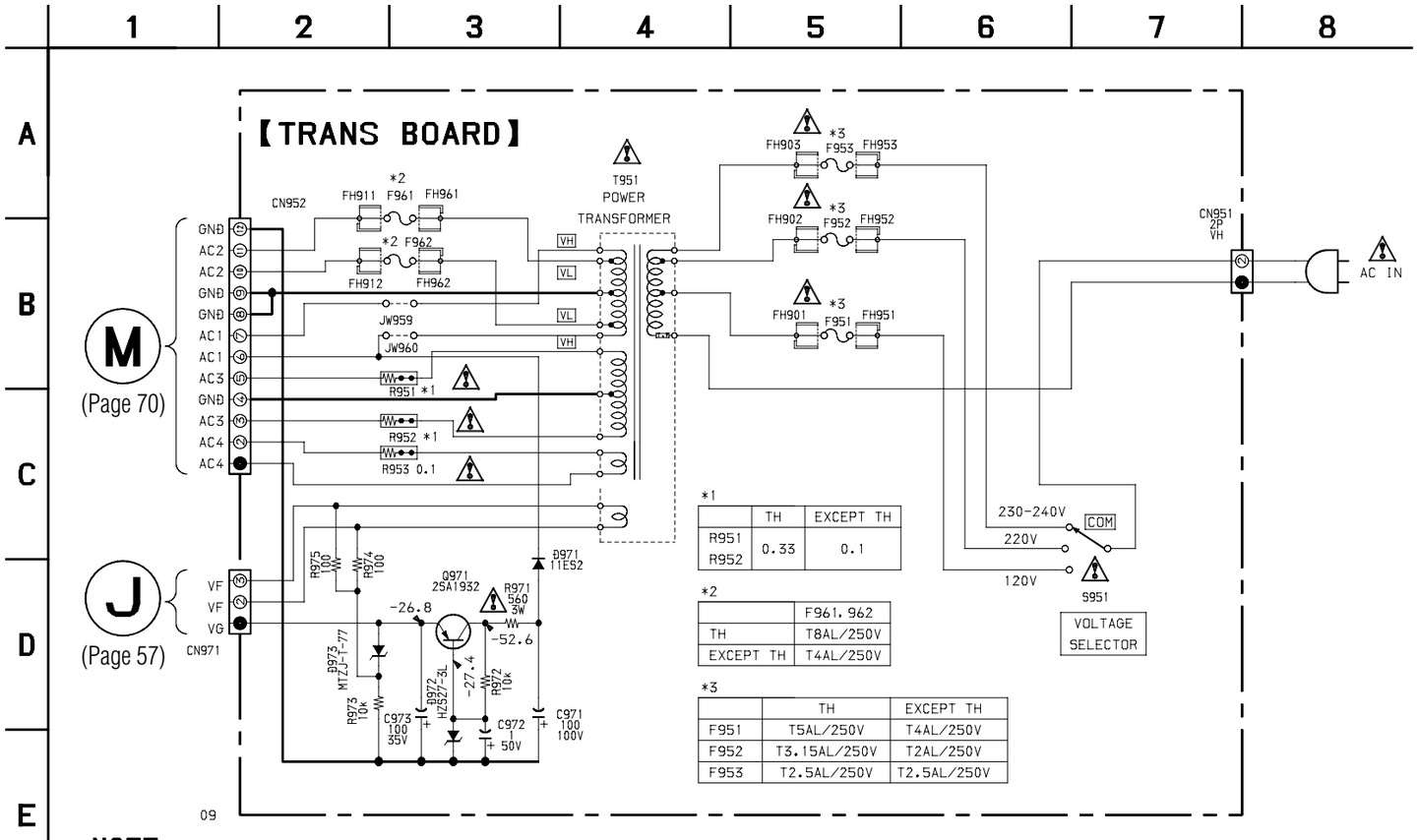








7-27. SCHEMATIC DIAGRAM – TRANS SECTION –



*1

	TH	EXCEPT TH
R951 R952	0.33	0.1

*2

	F961, 962
TH	T8AL/250V
EXCEPT TH	T4AL/250V

*3

	TH	EXCEPT TH
F951	T5AL/250V	T4AL/250V
F952	T3.15AL/250V	T2AL/250V
F953	T2.5AL/250V	T2.5AL/250V

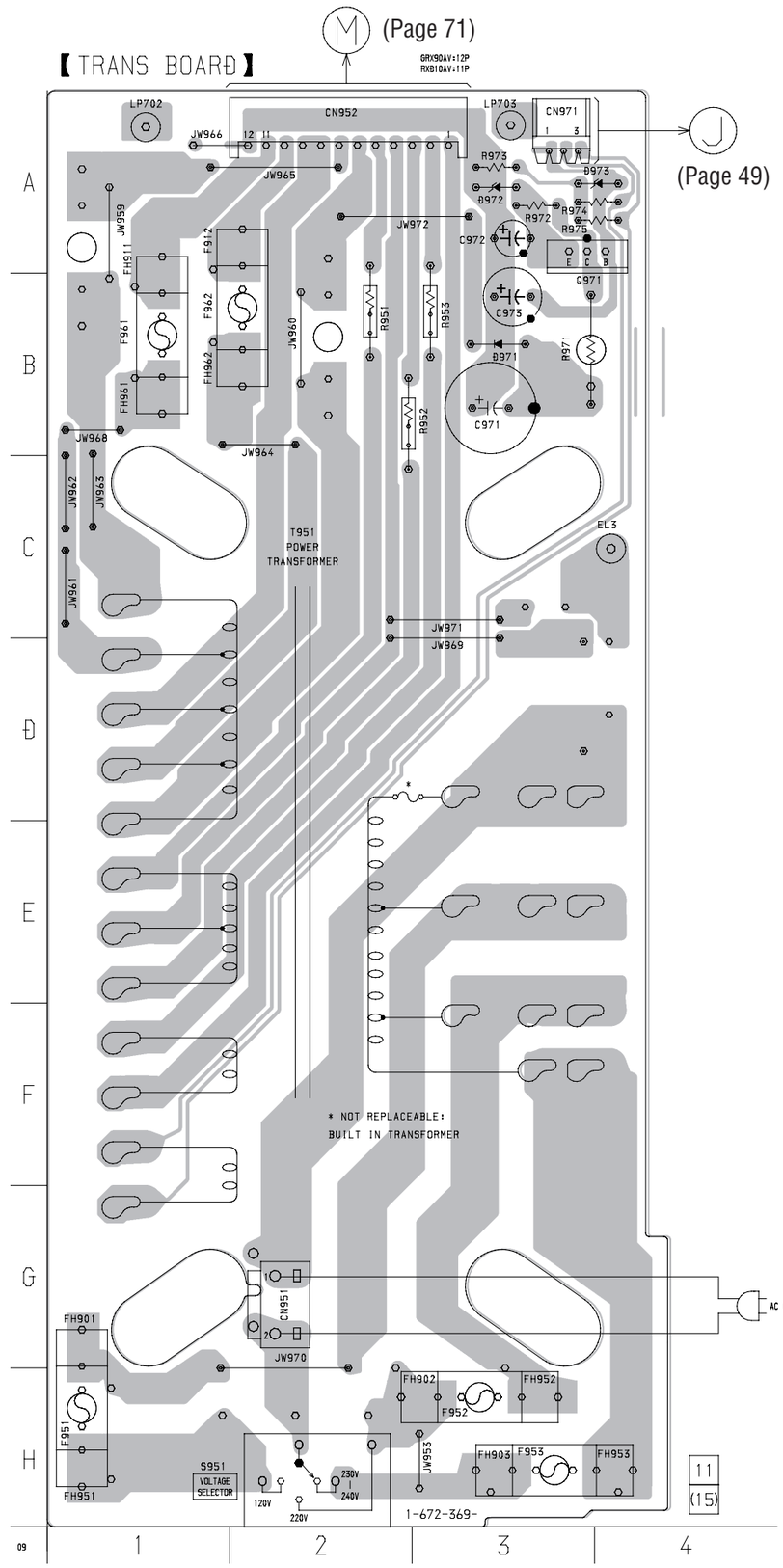
NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark:FM

Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

7-28. PRINTED WIRING BOARD – TRANS SECTION –

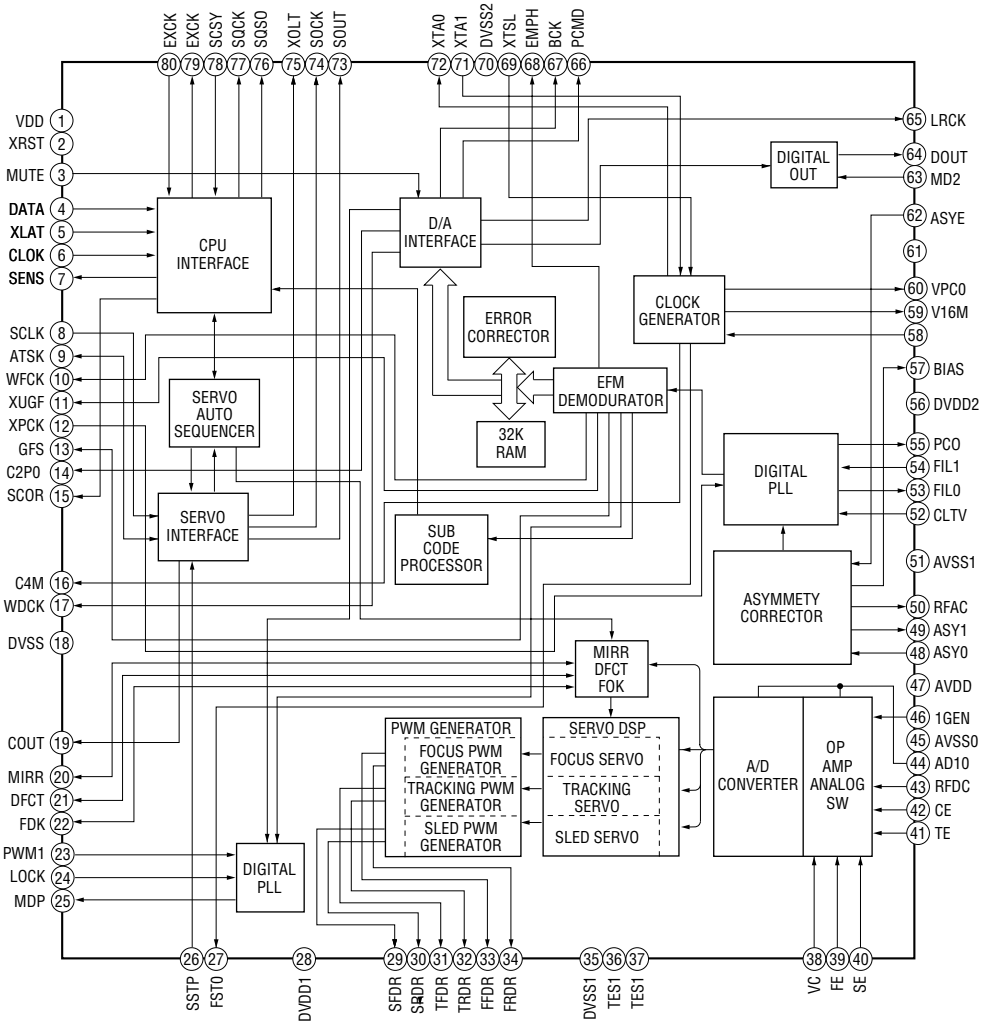
• See page 18 for Circuit Boards Location.



7-29. IC BLOCK DIAGRAMS

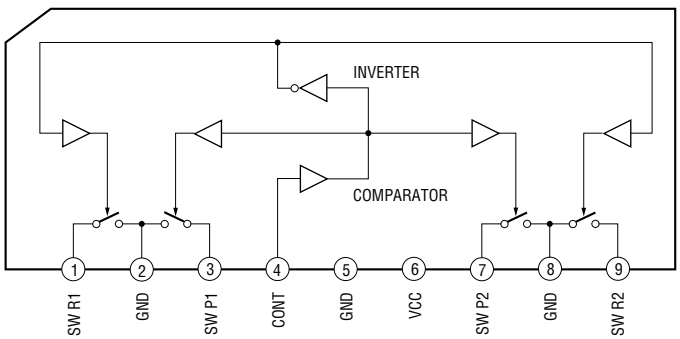
• BD Board

IC101 CXD3008Q



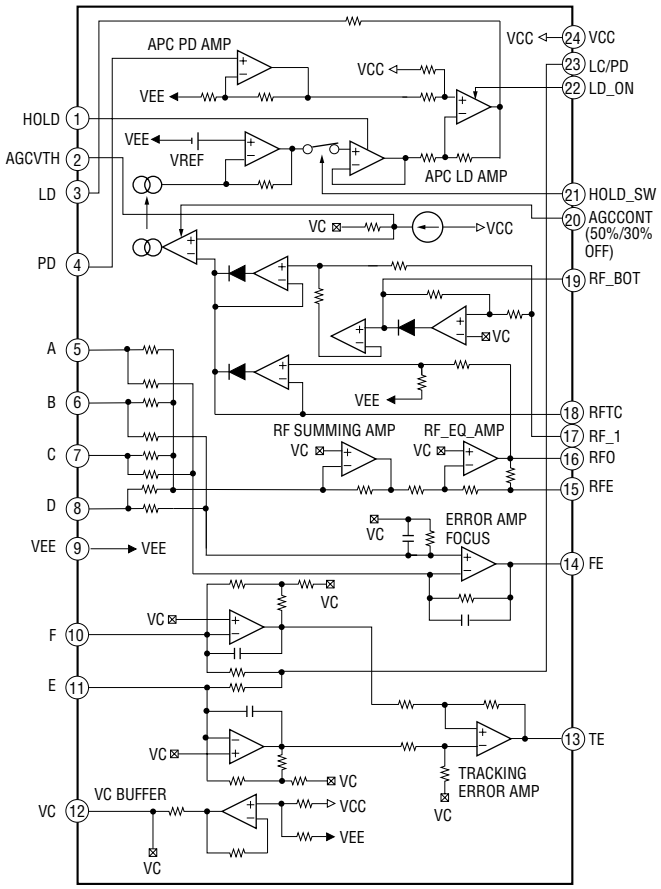
• AUDIO Board

IC602 UPC1330HA



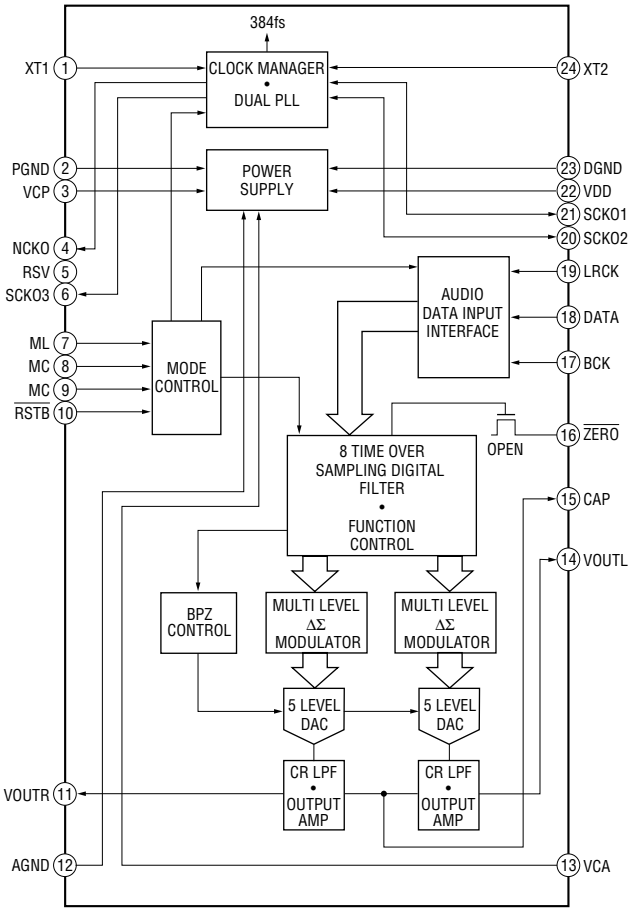
• BD Board

IC103 CXA2568M-T6



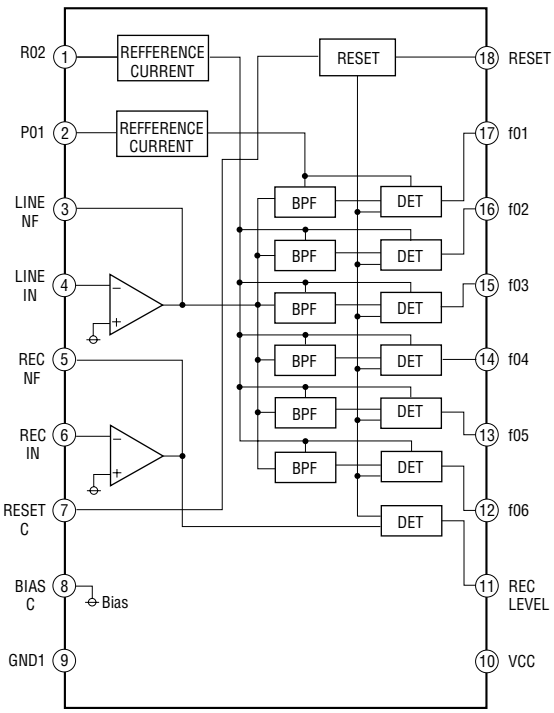
• VIDEO Board (3/3)

IC509 PCM1727E-2/T2



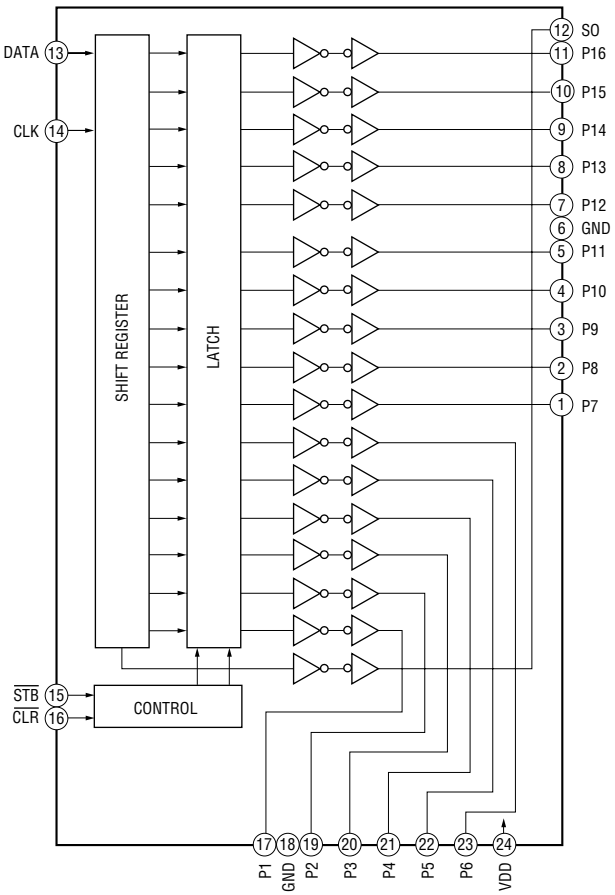
• PANEL Board (2/2)

IC603 BA3830F

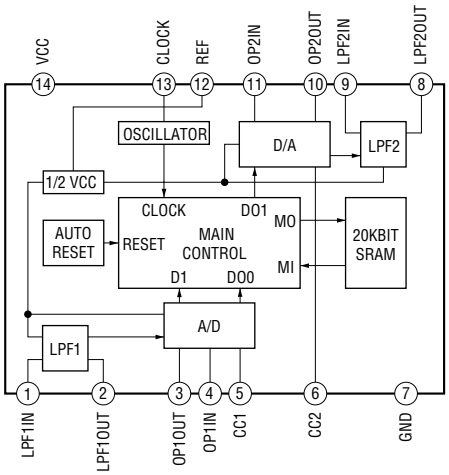


• **PANEL Board (1/2)**

IC604 NJU3716M-T2

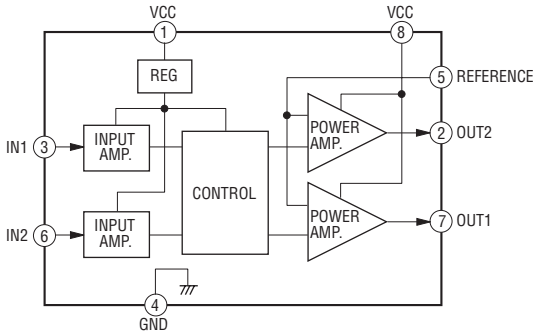


IC711 M65850FP



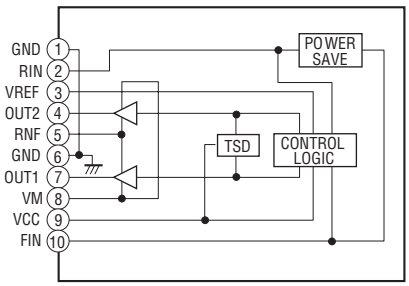
• **MOTOR (TURN) Board**

IC701 M54641L



• **MOTOR (SLIDE) Board**

IC801 BA6286N



7-30. IC PIN FUNCTIONS

• IC101 DIGITAL SIGNAL PROCESSOR (CXD3008Q) (BD Board)

Pin No.	Pin Name	I/O	Function
1	DVDD0	—	Digital power supply
2	XRST	I	System reset
3	MUTE	I	Muting selection pin
4	DATA	I	Serial data input, supplied from CPU
5	XLAT	I	Latch input, supplied from CPU
6	CLOK	I	Serial data transfer clock input, supplied from CPU
7	SENS	O	SENS output
8	SCLK	I	SENS serial data read-out clock
9	ATSK	I/O	Input pin for anti-shock (Ground)
10	WFCK	O	WFCK (Write Frame Clock) output (Not used)
11	XUGF	O	XUGF output (Not used)
12	XPCK	O	XPCK output (Not used)
13	GFS	O	GFS output (Not used)
14	C2P0	O	C2PO output
15	SCOR	O	Sub-code sync output
16	CM4	O	4.2336MHz output (Not used)
17	WDCK	O	48-bit slot D/A interface word clock (Not used)
18	DVSS	—	Digital ground
19	COUT	O	Numbers of track counted signal output (Not used)
20	MIRR	O	Mirror signal output (Not used)
21	DFCT	O	Defect signal output (Not used)
22	FOK	O	Focus OK output (Not used)
23	PWM1	I	(Not used)
24	LOCK	I/O	GFS in sampled by 460Hz (Not used)
25	MDP	O	Output to control spindle motor servo
26	SSTP	I	Input signal to detect disc inner most trak
27	FST0	O	2/3 divider output (Not used)
28	DVDD1	—	Digital power supply
29	SFDR	O	Sled drive output
30	SRDR	O	
31	TFDR	O	Tracking drive output
32	TRDR	O	
33	FFDR	O	Focus drive output
34	FRDR	O	
35	DVSS1	—	Digital ground
36	TEST	I	TEST pin connected normally ground
37	TES1	I	
38	VC	I	Center voltage input
39	FE	I	FOCUS error signal input
40	SE	I	Sled error signal input

Pin No.	Pin Name	I/O	Function
41	TE	I	Tracking error signal input
42	CE	I	Center servo analog input
43	RFDC	I	RF signal input
44	ADI0	O	Test pin (Not used)
45	AVSS0	—	Analog ground
46	IGEN	I	Power supply pin operational amplifiers
47	AVDD	—	Analog power supply
48	ASYO	O	EFM full swing output
49	ASYI	I	Asymmetry comparate voltage input
50	RFAC	I	EFM signal input
51	AVSS1	—	Analog ground
52	CLTV	I	Control voltage input for master VCO
53	FILO	O	Filter output for master PLL
54	FILI	I	Filter input for master PLL
55	PCO	O	Charge-pump output for master PLL
56	AVDD1	—	Analog power supply
57	BIAS	I	Asymmetry circuit constant current input
58	VCTL	I	Control voltage input for variable pitch PLL
59	V16M	I/O	16.9344MHz output (Not used)
60	VPCO	O	Charge-pump output for variable pitch PLL (Not used)
61	DVDD2	—	Digital power supply
62	ASYE	I	Asymmetry circuit ON/OFF
63	MD2	I	Digital-out ON/OFF control
64	DOUT	O	Digital-out output
65	LRCK	O	48-bit slot D/A interface, LR clock output
66	PCMD	O	48-bit slot D/A interface, Serial deta output
67	BCLK	O	48-bit slot D/A interface, bit clock output
68	EMPH	O	Playback disc output in emphasis mode (Not used)
69	XTSL	I	X’tal selection input pin
70	DVSS2	—	Digital ground
71	XTAI	I	X’tal oscillator circuit input
72	XTAO	O	X’tal oscillator circuit output (Not used)
73	SOUT	O	(Not used)
74	SOCK	O	
75	XOCT	O	
76	SQSO	O	Sub-Q serial output
77	SQCK	I	Clock input for SQSO read-out
78	SCSY	I	Sub-code input
79	SBSO	O	Sub-P through Sub-W serial output (Not used)
80	EXCR	I	Clock input for SBSO read-out

• **IC502 MPEG DECODER, MECHANISM CONTROL (M30620MC-A05FP) (VIDEO Board (1/3))**

Pin No.	Pin Name	I/O	Function
1	SENSE	I	Internal state (SENSE) monitor input (IC101)
2	SENSE CLK	O	Serial data reading clock output (IC101)
3	DSP DATA	O	Serial data output (IC101)
4	DSP LATCH	O	Lach output (IC101)
5	DSP CLK	O	Serial data clock output (IC101)
6	TSENS	I	Not used
7	REMOTE IN	I	Not used
8	BYTE	I	External bus width change input (Connected to ground)
9	VSS	–	Ground
10	DSP MUTE	O	Mute output (IC101) “H” : mute
11	CTRL1 (L : DOUBLE)	O	Double change output (IC101) “L” : double
12	XRESET	I	System reset input “L” : reset
13	XOUT	O	Main clock output (10MHz)
14	VSS	–	Ground
15	XIN	I	Main clock input (10MHz)
16	VCC	–	+5V power supply
17	NMI	I	Requests mask disable interruption input (Connected to +5V)
18	SCOR	I	Subcode sync input (IC101)
19	D SENS	I	Not used
20	CL680 INT	I	Video CD interruption input (IC505)
21	CL680 HSEL	O	Video CD select data of the host MPU (IC505)
22	DF LATCH	O	Digital filter latch output (IC509)
23	CL680 HRDY	I	Ready signal input for communication to the host MPU (IC505)
24	680 RESET	O	Video CD reset output (IC505) “L” : reset
25	JOG1	I	Not used
26	JOG2	I	Not used
27	CTRL2	O	Double control output (IC101) “H” : double
28	LD ON	O	Laser diode ON/OFF output
29	IIC1	I/O	IIC clock input from master control
30	IIC0	I/O	IIC data input from master control
31	DATA1O	O	Serial 1 data output (IC505, 509)
32	DATA1I	I	Serial 1 data input (IC505, 509)
33	CLK1	O	Serial 1 clock output
34	SHARPNESS	O	Sharpness output L : normal, H : sharpness
35	XVLEVEL. DOWN	O	Fix the video signal output level output
36	SUBQ DATA	I	Serial 2 data input for subcode sync reading
37	SUBQ CLK	I	Serial 2 clock input for subcode sync reading
38	P. ON	I	Not used
39	BUS XRDY	I	Not used
40	BUS	I	Not used
41	BUS XHOLD	I	Not used
42, 43	BUS	I	Not used
44	BUS XRD	I	Model selection input “L” : chinese model, “H” : except chinese model
45	BUS	I	V sync signal input

Pin No.	Pin Name	I/O	Function
46	BUS XWRL	I	Not used
47	LO. BOOST	I	Not used
48	AUDIO MUTE	O	Audio mute output “L” : mute
49	LOAD OUT	I	Not used
50	LOAD IN	I	Not used
51	INSW	I	Not used
52	OUTSW	I	Not used
53	MODEL 1	I	L : System input (Fixed at “L”)
54	MODEL 2	I	L : System input (Fixed at “L”)
55	TBLL	I	Not used
56	TBLR	I	Not used
57	ENC 1	I	Not used
58	ENC 2	I	Not used
59	ENC 3	I	Not used
60	—	I	Not used
61	—	I	Not used
62	VCC	–	+5V power supply
63	—	I	Not used
64	VSS	–	Ground
65	A7	O	Video mute output “L”
66 to 71	A6 to A1	I	Not used
72	U to I	I	IIC convertion microcomputor transmittion input
73	TEST LED	O	TEST LED for MPEG decoder
74	TEST 1	I	Test mode for Video CD check
75	TEST 2	I	Test mode for servo check
76	TEST 3	I	Not used
77	DEVICE RESET	O	Device system rest output “L” : reset
78	STANDBY	I	Not used
79	FL CS	I	Not used
80	FL	I	Not used
81 to 88	D7 to D0	I	Not used
89	MIC CTRL	I	Not used
90	KEY 1	I	Not used
91	KEY 2	I	Not used
92	KEY 3	I	Not used
93	NY/PAL	I	NTSC/PAL select switch input
94	MUSIC VOL	I	Not used
95	KEY 4	I	Not used
96	AVSS	–	A/D converter ground
97	MODE. SW	I	Not used
98	VREF	I	A/D converter reference voltage input (Connected to +5V)
99	AVCC	–	A/D converter +5V power supply
100	AMP. ON	I	Not used

• **IC505 CD DECODER, SYSTEM CONTROL (CL680T-D1) (VIDEO Board (2/3))**

Pin No.	Pin Name	I/O	Function
1	NC	–	Not used
2	VSS	–	Ground
3	CD-BCK	I	CD Decode bit clock
4	CD-DATA	I	CD Decode data
5	CD-LRCK	I	CD Decode Left or Right channel selection clock
6	CD-C2PO	I	CD Decode C2 error data
7	NC	–	Not used
8	NC	–	Not used
9	NC	–	Not used
10	MD0	I/O	Data bus between Microcode ROM/DRAM and CL680
11	MD1	I/O	Data bus between Microcode ROM/DRAM and CL680
12	MD2	I/O	Data bus between Microcode ROM/DRAM and CL680
13	MD3	I/O	Data bus between Microcode ROM/DRAM and CL680
14	MD4	I/O	Data bus between Microcode ROM/DRAM and CL680
15	MD5	I/O	Data bus between Microcode ROM/DRAM and CL680
16	VSS	–	Ground
17	MD6	I/O	Data bus between Microcode ROM/DRAM and CL680
18	VDD3	–	+3.3V Power supply
19	MD7	I/O	Data bus between Microcode ROM/DRAM and CL680
20	VSS	–	Ground
21	MD8	I/O	Data bus between Microcode ROM/DRAM and CL680
22	VDD3	–	+3.3V Power supply
23	MD9	I/O	Data bus between Microcode ROM/DRAM and CL680
24	MD10	I/O	Data bus between Microcode ROM/DRAM and CL680
25	MD11	I/O	Data bus between Microcode ROM/DRAM and CL680
26	MD12	I/O	Data bus between Microcode ROM/DRAM and CL680
27	MD13	I/O	Data bus between Microcode ROM/DRAM and CL680
28	MD14	I/O	Data bus between Microcode ROM/DRAM and CL680
29	MD15	I/O	Data bus between Microcode ROM/DRAM and CL680
30	NC	–	Not used
31	NC	–	Not used
32	NC	–	Not used
33	NC	–	Not used
34	NC	–	Not used
35	NC	–	Not used
36	NC	–	Not used
37	$\overline{\text{MCE}}$	O	Chip enable signal to Microcode ROM
38	$\overline{\text{MWE}}$	O	Write enable signal to DRAM
39	VSS	–	Ground
40	CAS	O	Column address strove : Latch the column address to DRAM
41	VDD3	–	+3.3V power supply
42	$\overline{\text{RAS0}}$	O	Row address strove : Latch row address to DRAM
43	$\overline{\text{RAS1}}$	–	Not used
44	MA10	O	Address data from CL680 to Microcode ROM
45	MA9	O	Address data from CL680 to Microcode ROM

Pin No.	Pin Name	I/O	Function
46	MA8	O	Address data from CL680 to Microcode ROM/DRAM
47	VSS	–	Ground
48	MA7	O	Address data from CL680 to Microcode ROM/DRAM
49	VDD3	–	+3.3V Power supply
50	MA6	O	Address data from CL680 to Microcode ROM/DRAM
51	MA5	O	Address data from CL680 to Microcode ROM/DRAM
52	MA4	O	Address data from CL680 to Microcode ROM/DRAM
53	VSS	–	Ground
54	MA3	O	Address data from CL680 to Microcode ROM/DRAM
55	VDD3	–	+3.3V Power supply
56	MA2	O	Address data from CL680 to Microcode ROM/DRAM
57	MA1	O	Address data from CL680 to Microcode ROM/DRAM
58	MA0	O	Address data from CL680 to Microcode ROM/DRAM
59	PGIO7	I/O	Not used
60	$\overline{\text{RESET}}$	I	Reset signal input from the host MPU
61	VDDMAX-IN	I	Fix the maxium input voltage each input pin and I/O pin
62	NC	–	Not used
63	NC	–	Not used
64	NC	–	Not used
65	AGND DAC	–	Ground
66	AVDD DAC	–	+3.3V Power supply
67	COMPOS OUT	O	Not used
68	AGND DAC	–	Ground
69	Y-OUT	O	Luminance signal out
70	AVDD DAC	–	+3.3V Power supply
71	AGND DAC	–	Ground
72	RREF	I	Fix the video signal output level
73	(1.235V) VREF	O	Reference voltage (+1.235V)
74	AVDD DAC	–	+3.3V Power supply
75	C-OUT	O	Chrominance signal out
76	AGND DAC	–	Ground
77	(GCK INT) CLK SEL	I	GCK selection “H”; Internal, “L”; External
78	CLK SEL	I	DA-XCK selection (1)
79	CLK SEL	I	DA-XCK selection (2)
80	VSS	–	Ground
81	RESERVED	I	Selection the operation clock 42.336MHz
82	VDD3	–	+3.3V Power supply
83	DA-EMP	–	Not used
84	RESERVED	–	Not used
85	AGND PLL	–	Ground
86	DA-XCLK	I	Main reference clock input (16.9344MHz=384fs)
87	AVDD PLL	–	+3.3V
88	PGIO4	I/O	Not used
89	PGIO5	I/O	Not used
90	PGIO6	I/O	Not used

Pin No.	Pin Name	I/O	Function
91	PGIO0	I/O	Not used
92	PGIO8	I/O	Not used
93	PGIO2/$\overline{\text{VSYNC}}$/CSYNC	O	Vertical synchronized signal of video signal
94	AVDD PLL	–	+3.3V Power supply
95	NC	–	Not used
96	NC	–	Not used
97	NC	–	Not used
98	AGND PLL	–	Ground
99	VSS	–	Ground
100	NC	–	Not used
101	PGIO3/$\overline{\text{HSYNC}}$	I/O	Not used
102	VDD3	–	+3.3V Power supply
103	PGIO1/VCK-OUT	I/O	Not used
104	VSS	–	Ground
105	GCK	I	Not used
106	VCK-IN	I	Main clock for video signal processer
107	GCKOUT/DA-EMP	O	Not used
108	DA-LRCK	O	Digital Audio Left or Right channel selection clock
109	VDDMAX-OUT	O	Fix the maxium output voltage certain output pins (Connected to +5V)
110	DA-DATA	O	Digital Audio data
111	DA-BCK	O	Digital Audio bit clock
112	HD-OUT	O	Serial Data output from CL680 to the host MPU
113	HRDY	O	Ready signal CL680 is ready for communication to the host MPU
114	$\overline{\text{HINT}}$	O	Request signal for interrupting the host MPU
115	CDG-SCK	I/O	Not used
116	VSS	–	Ground
117	HCK	I	Host clock : referance signal for the host bus interface
118	VDD3	–	+3.3V Power supply
119	HD-IN	I	Serial Data output ftom the host MPU to CL680
120	VDD3	–	+3.3V Power supply
121	HSEL	I	Select data or address of the host MPU
122	CDG-SDATA	I	Ground (Not used)
123	CDG-VFSY	I	Ground (Not used)
124	CDG-SOS1	I	Ground (Not used)
125	NC	–	Not used
126	NC	–	Not used
127	NC	–	Not used
128	NC	–	Not used

• **IC501 MASTER CONTROL (M30622MA-A09FP) (MAIN Board (3/4))**

Pin No.	Pin Name	I/O	Function
1	STK-MUTE	O	Power amp ON/OFF signal output
2	POWER	O	Power ON/OFF signal output
3	F-RELAY	O	Front speaker relay control output
4	REAR-RELAY	O	Rear speaker relay control output (Not used)
5	CD-POWER	O	CD power on signal output
6	LINE-MUTE	O	Line mute ON/OFF selection output
7	DBFB-H/L	O	DBFB H/L select signal output
8, 9	–	–	Not used
10	XC-IN	I	X'tal (32.768MHz)
11	XC-OUT	O	
12	RESET	I	Reset signal input
13	X-OUT	O	X'tal (16MHz)
14	VSS	–	Ground
15	X-IN	I	X'tal (16MHz)
16	VCC	–	Power supply (+5V)
17	NMI	I	Not used (PULL UP EVER+5V)
18	WAKE UP	I	WAKE UP (Fixed at fixed at "L")
19	SCOR	I	Subcode data request signal output (Not used)
20	RDS-INT	I	RDS data interrupt input
21	RDS-DATA	I	
22	AC-CUT	I	Back up signal input
23	PL-CLK	O	Clock signal to pro-logic (Not used)
24	PL-DATA	O	Data signal to pro-logic (Not used)
25	PL-LAT	O	Latch signal to pro-logic (Not used)
26	TIMER LED	I	Timer LED ON/OF
27	PROTECTOR	I	Speaker protect ON/OF
28	–	–	Not used
29	IIC-CLK	O	Clock output for IC601
30	IIC-DATA	O	Data output for IC601
31	–	–	Not used
32	SQ-DATA	I	Subcode Q data clock input
33	SQ-CLK	I	Not used
34	SW-MODE	O	Not used
35	CD-DATA	O	CD data output (Not used)
36	RY-SW	I	Head phone swich detect
37	CD-CLK	O	CD clock output (Not used)
38	493-LAT	O	Latch signal output for M62493FP (IC101)
39	ST-BY LED/ CLOCK-OUT	O	Clock ond stand by LED signal output
40	L+R/L-R	I	Not used
41	BY-PASS	I	
42	FL-SW	I	FL switch ON/OFF
43	STBY RELAY	I	Stand by relay ON/OFF
44	BASS FREQ	O	FREQ high/low signal for SYNC bass
45, 46	–	–	Not used
47	493-DATA	O	Data output for M62493FP (IC101)
48	493-CLK	O	Clock output for M62493FP (IC101)
49	ST-MUTE	O	Tuned mute signal output

Pin No.	Pin Name	I/O	Function
50	STEREO	I	Stereo detection for tuner
51	TUNED	I	Tuned detection for tuner
52	ST-CE	O	Tuner chip enable output
53	ST-DOUT	O	Tuner data output
54	ST-DIN	I	Tuner data input
55	ST-CLK	O	Tuned clock output
56	SENS	I	BD Condition signal input (Not used)
57	HDLD	O	Mode hold signal output (Not used)
58	XLT	O	CD latch signal output (Not used)
59	XRST	O	CD reset signal output
60	DISC-SENS	I	Slit sensor of disc table input
61	T-SENS	I	CD table detection signal input
62	VCC	–	Power supply (+5V)
63	TBL-L	O	Table motor control output
64	VSS	–	Ground
65	TBL-R	O	Table motor control output
66	LOAD-OUT	O	Loading motor control signal output
67	LOAD-IN	O	
68	ENC 3/UP-SW	I	Disc tray address detect encoder input
69	ENC 2/DISC-LED	I	
70	ENC 1	I	
71	OUT-OPEN	O	Loading out detection signal output
72	B-TRG	O	Trigger motor control output
73	A-TRG	O	
74	CAP-M-COT2	O	Capstan motor control 1(-) signal output
75	CAP-M-COT1	O	Capstan motor control 2(-) signal output
76	CAP-M-H/L	O	Capstan motor H/L speed select signal output
77	AMS-IN	I	Connected to ground
78	TC-MUTE	O	TC mute ON/OFF selection output
79	R/PB/PAS	O	REC/PB/PASS selection output
80	NR-ON/OFF	O	NR ON/OFF signal output
81	REC-MUTE	O	REC mute ON/OFF selection output
82	BIAS	O	Bias ON/OFF selection output
83	EQ-H/N	O	Equalizer H/N select output
84	PB-A/B	O	PB Deck A/Deck B select output
85	ALC	O	ALC ON/OFF output
86	B-PLAY-SW	I	Deck B play detect
87	A-PLAY-SW	I	Deck A play detect
88	A-HALF	I	Deck A cassette detect
89	B-HALF	I	Deck B cassette detect
90	B-SHUT	I	B Deck reel pulse detector
91	A-SHUT	I	A Deck reel pulse detector
92	SOFT-TEST	O	Software test port
93, 94	KEY/CD-ADJ	I	CD adjust point port
95	MODEL IN	I	Version select signal input
96	AVSS	–	Ground
97	SPEC-IN	I	Version select signal input
98	VREF	I	Analog reference voltage input
99	AVCC	–	Analog power supply
100	TC-RELAY	O	REC/PB head selection output for IC602

• **IC601 DISPLAY CONTROL (TMP88CS76F-6005) (PANEL Board (2/2))**

Pin No.	Pin Name	I/O	Function
1	SIRCS	I	Remote commander signal input
2	JOG A	I	Rotary encoder (S601) pulse input
3	L/P SCK	O	LED/PAD clock output
4	LED LA	O	LED latch output
5	L/P DAT	O	LED/PAD data output
6	PAD LA	O	PAD latch output
7	L SEL	O	LED select signal
8	JOG B	I	Rotary encoder (S601) pulse input
9	VOL A	I	Rotary encoder (S602) pulse input
10	VOL B	I	
11 to 14	KEY 0 to KEY 3	I	Key input
15	GRADATION L	O	LED gradation signal (left)
16	S LOW (F01)	O	Sptctrum analyzer input (Super low flegency) (40Hz)
17	BPF 1 (F02)	O	Sptctrum analyzer input (100Hz)
18	BPF 2	O	Sptctrum analyzer input (400Hz)
19	BPF 3	O	Sptctrum analyzer input (2KHz)
20	BPF 4	O	Sptctrum analyzer input (6KHz)
21	ALL B (L+R)	I	Sptctrum analyzer input (all band)
22	GLADATION R/WAKE UP	O	LED gradation signal (right)/WAKE UP signal
23	VSS I/O	–	Ground
24	VASS	–	Ground
25	VAref	I	Analog reference voltage input
26	VDD I/O	–	Power supply (+5V)
27 to 40	G 18 to G 5	O	FL gride signal output
41	VDD VFT	–	Power supply (+5V)
42 to 45	G 4 to G 1	O	FL gride signal output
46 to 67	S 1 to S 22	O	FL segment signal output
68	VKK	–	Power supply (-30V)
69	VDD for CPU	–	Power supply (+5V)
70	X IN	I	X'tal (12.5MHz)
71	VSS for CPU	–	Ground
72	X OUT	O	X'tal (12.5MHz)
73	RESET	I	Reset signal input from main controller
74	CH for PAD	O	Channel signal output for PAD
75	BUSY for PAD	O	Busy signal output for PAD
76	TEST	I	Connected ground
77	–	–	Not used (to ground)
78	IIC DATA	O	Data output for IC501
79	IIC CLK	O	Clock output for IC501
80	–	–	Not used (to ground)

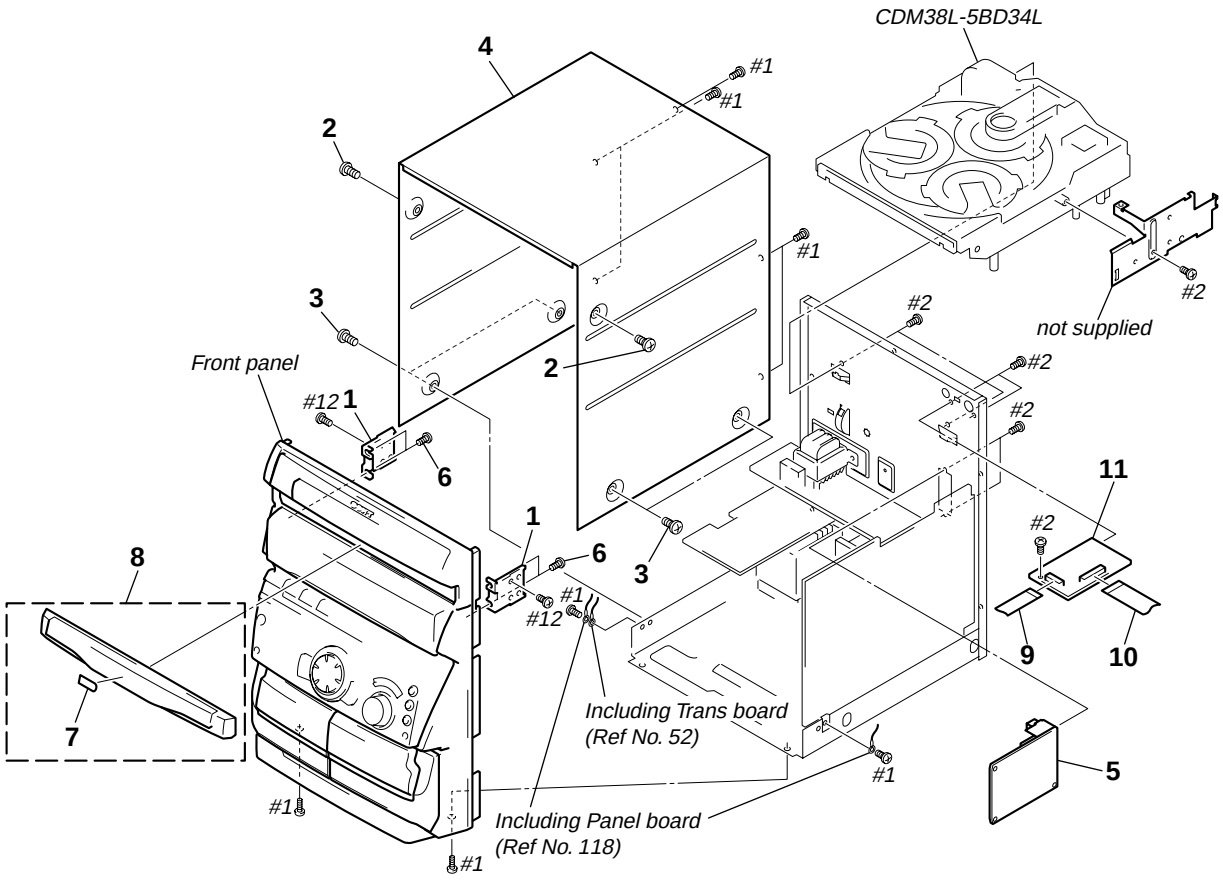
SECTION 8
EXPLODED VIEWS

NOTE:
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.
- Color Indication of Appearance Parts Example:
  KNOB, BALANCE (WHITE)
  ↑
  Cabinets color

- Abbreviation
  EA : Saudi Arabia model
  SP : Singapore model
  MY : Malaysia model
  IA : Indonesia model
  TH : Thai model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

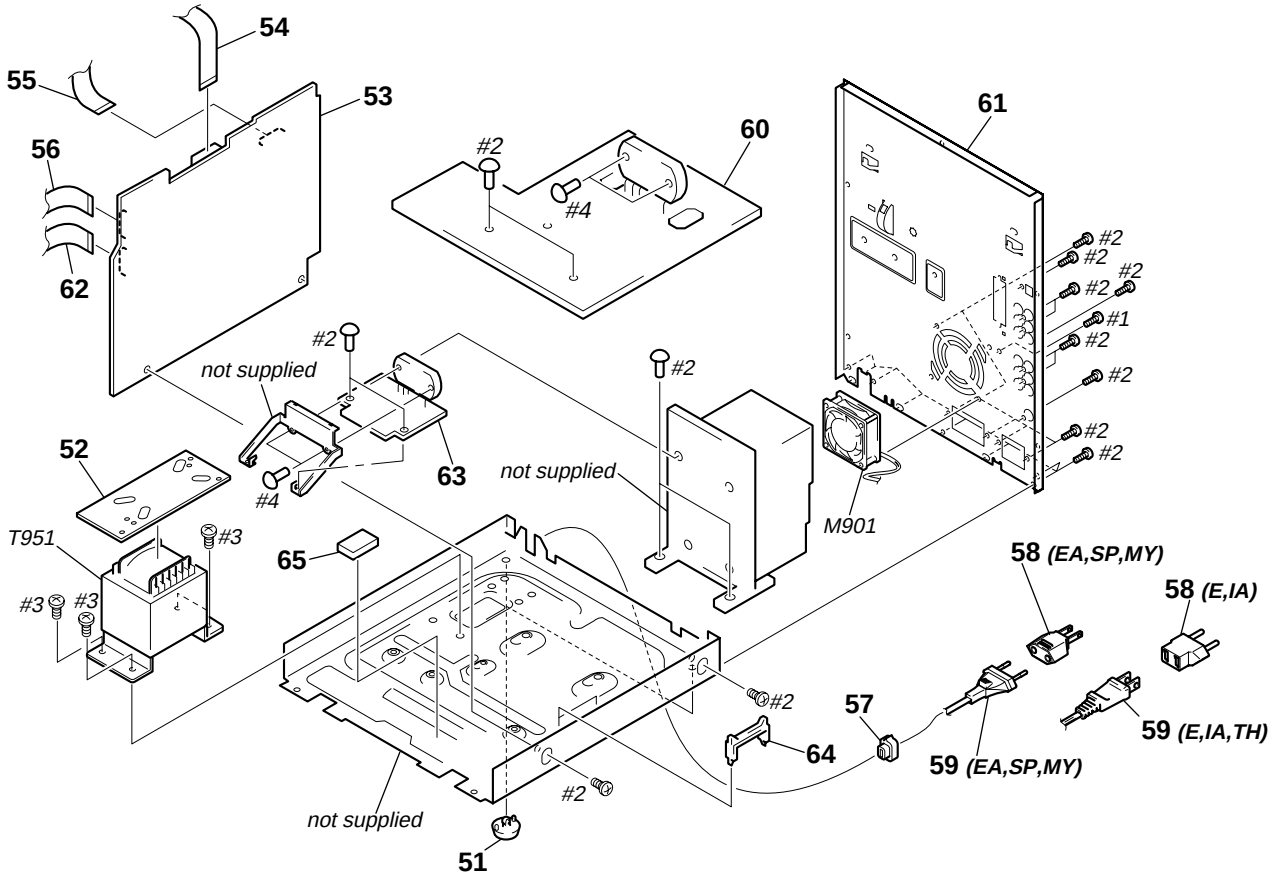
8-1. CASE SECTION



Ref. No.	Part No.	Description	Remark
1	4-996-716-01	HOLDER (CDM)	
2	3-363-099-41	SCREW (CASE 3 TP2) (GRAY)	
2	3-363-099-71	SCREW (CASE 3 TP2) (SILVER)	
3	3-363-099-01	SCREW (CASE 3 TP2) (GRAY)	
3	3-363-099-11	SCREW (CASE 3 TP2) (SILVER)	
4	4-215-179-21	CASE (SILVER)	
4	4-221-148-41	CASE (GRAY)	
5	1-233-545-11	TUNER UNIT (FM/AM) (TH)	
5	1-233-546-11	TUNER UNIT (FM/MW/SW) (EXCEPT TH)	

Ref. No.	Part No.	Description	Remark
6	4-951-620-01	SCREW (2.6X8), +BVTP	
7	4-991-781-01	EMBLEM (VCD)	
8	X-4950-967-1	PANEL ASSY, LOADING (GRAY)	
8	X-4951-012-1	PANEL ASSY, LOADING (SILVER)	
9	1-783-949-11	WIRE (FLAT TYPE) (13 CORE)	
10	1-775-212-11	WIRE (FLAT TYPE) (23 CORE)	
11	A-4724-729-A	VIDEO BOARD, COMPLETE	

8-2. CHASSIS SECTION

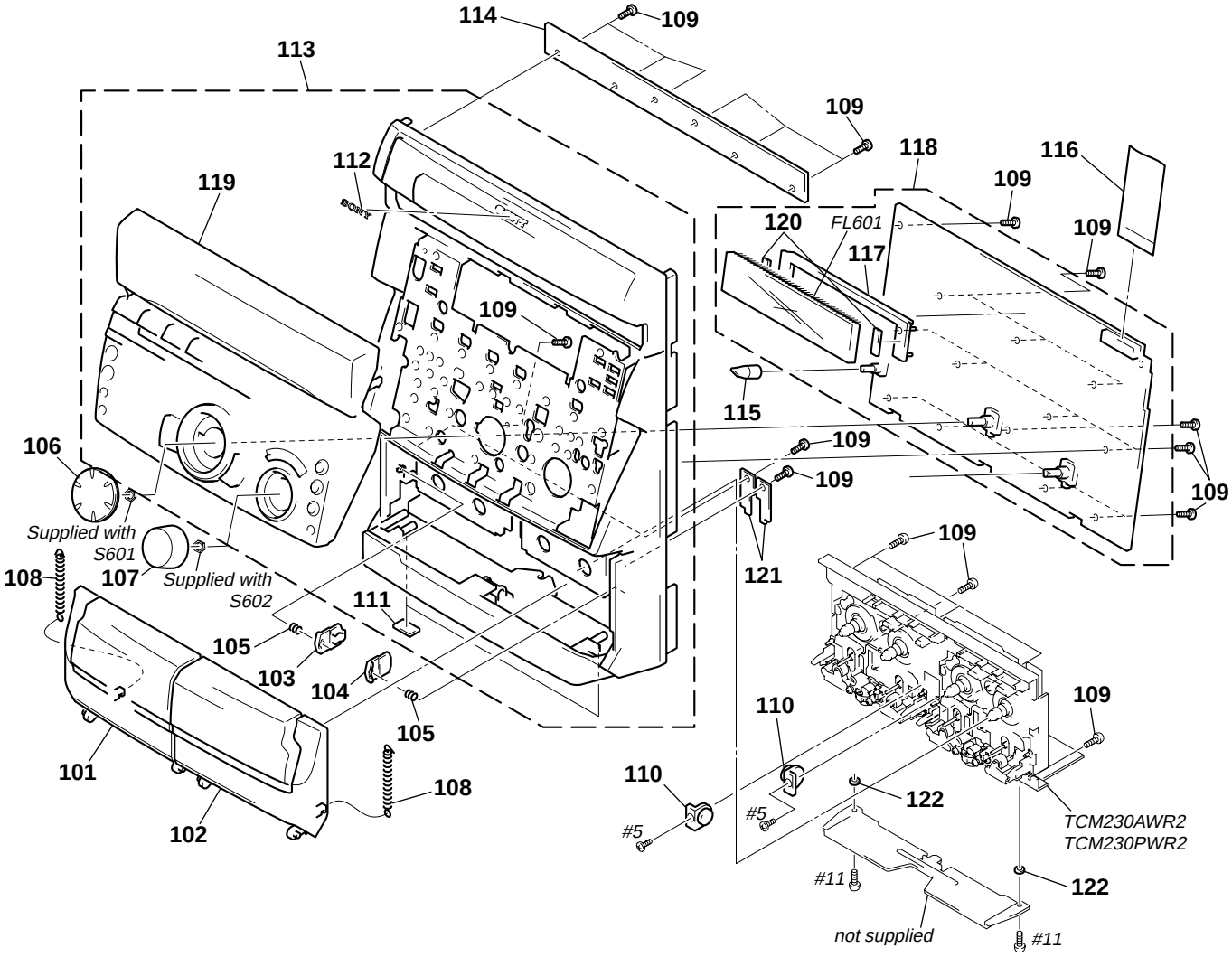


The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
51	4-965-822-01	FOOT	
* 52	1-672-369-11	TRANS BOARD	
53	A-4417-910-A	MAIN BOARD, COMPLETE (TH)	
53	A-4417-918-A	MAIN BOARD, COMPLETE (EA)	
53	A-4417-955-A	MAIN BOARD, COMPLETE (E,SP,MY,IA)	
54	1-783-570-11	WIRE (FLAT TYPE) (19 CORE)	
55	1-769-976-11	WIRE (FLAT TYPE) (13 CORE) (TH)	
55	1-773-008-11	WIRE (FLAT TYPE) (15 CORE) (140 mm)	(EXCEPT TH)
56	1-773-049-11	WIRE (FLAT TYPE) (17 CORE)	
57	3-703-244-00	BUSHING (FBS001), CORD (SP,MY)	
57	3-703-571-11	BUSHING (S)(4516), CORD (TH)	
57	4-966-266-01	BUSHING (S)(FBS002), CORD (E,EA,IA)	
58	1-569-007-11	ADAPTOR, CONVERSION 2P (E,IA)	
58	1-569-008-21	ADAPTOR, CONVERSION 2P (EA,SP,MY)	

Ref. No.	Part No.	Description	Remark
⚠59	1-575-651-11	CORD, POWER (EA,SP,MY)	
⚠59	1-575-653-11	CORD, POWER (E,IA,TH)	
60	A-4426-201-A	FRONT AMP BOARD, COMPLETE	
61	4-215-642-11	PANEL, BACK (EA,SP,MY)	
61	4-215-642-31	PANEL, BACK (IA)	
61	4-215-642-41	PANEL, BACK (E)	
61	4-215-642-51	PANEL, BACK (TH)	
62	1-773-023-11	WIRE (FLAT TYPE) (15 CORE) (310 mm)	
63	A-4417-794-A	3CH AMP BOARD, COMPLETE	
* 64	4-988-533-01	PCB HOLDER	
65	4-985-642-01	CUSHION	
M901	1-763-072-11	FAN, DC	
⚠T951	1-433-555-11	TRANSFORMER, POWER	

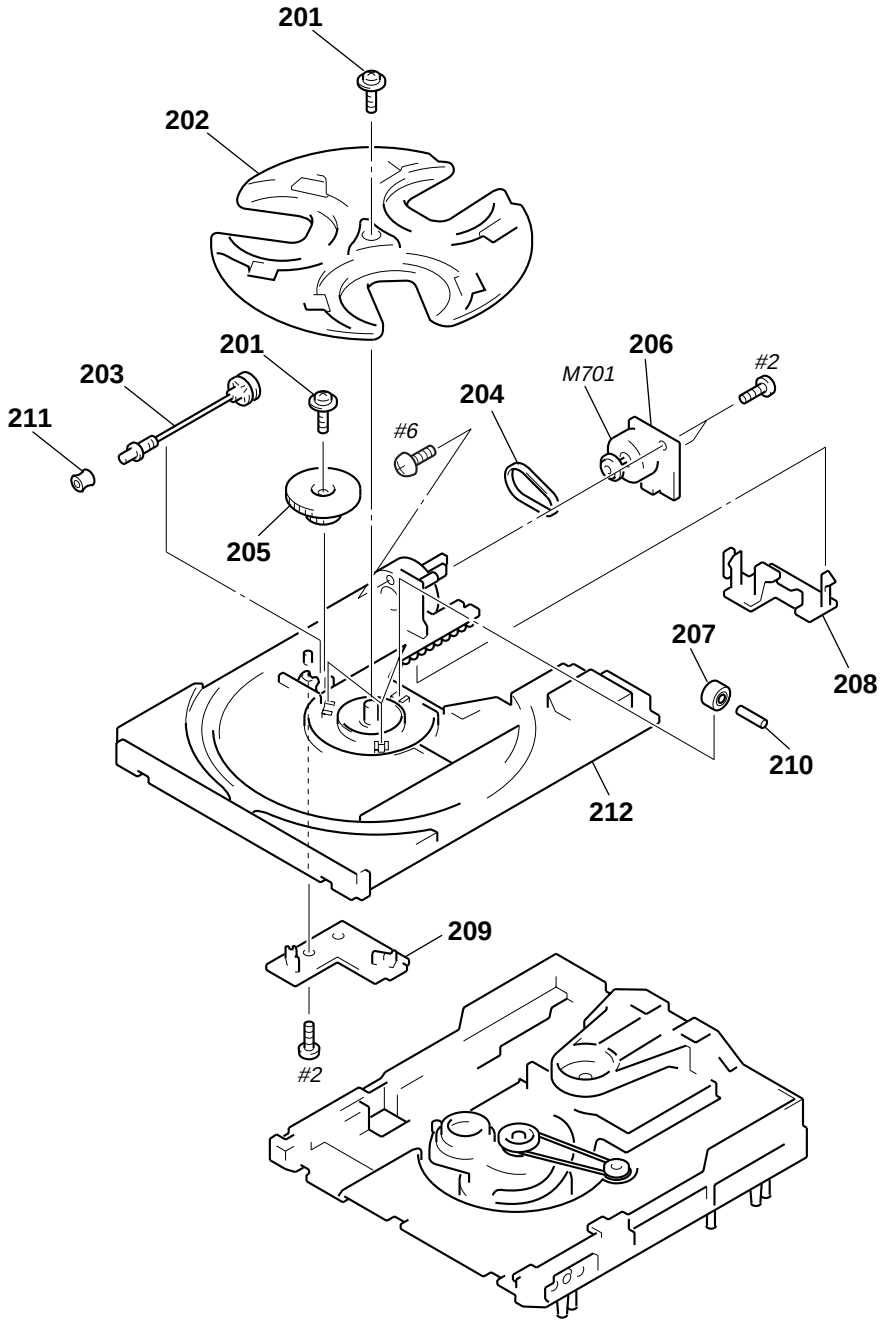
8-3. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark
101	X-4951-067-1	HOLDER (L) ASSY, CASSETTE (SILVER)	
101	X-4951-069-1	HOLDER (L) ASSY, CASSETTE (GRAY)	
102	X-4951-068-1	HOLDER (R) ASSY, CASSETTE (SILVER)	
102	X-4951-070-1	HOLDER (R) ASSY, CASSETTE(E,EA)(GRAY)	
103	4-214-760-11	CATCHER (A), PUSH	
104	4-214-761-11	CATCHER (B), PUSH	
105	4-214-775-01	SPRING, PUSH CATCHER RETURN	
106	4-214-383-11	KNOB (JOG) (SILVER)	
106	4-214-383-41	KNOB (JOG) (GRAY)	
107	4-214-384-11	KNOB (VOL) (SILVER)	
107	4-214-384-41	KNOB (VOL) (GRAY)	
108	4-219-087-01	SPRING, TENSION	
109	4-951-620-01	SCREW (2.6X8), +BVTP	
110	4-215-062-01	DAMPER	
111	4-930-336-61	FOOT (FELT) (TH)	
111	4-988-663-01	FOOT (FELT) (EXCEPT TH)	

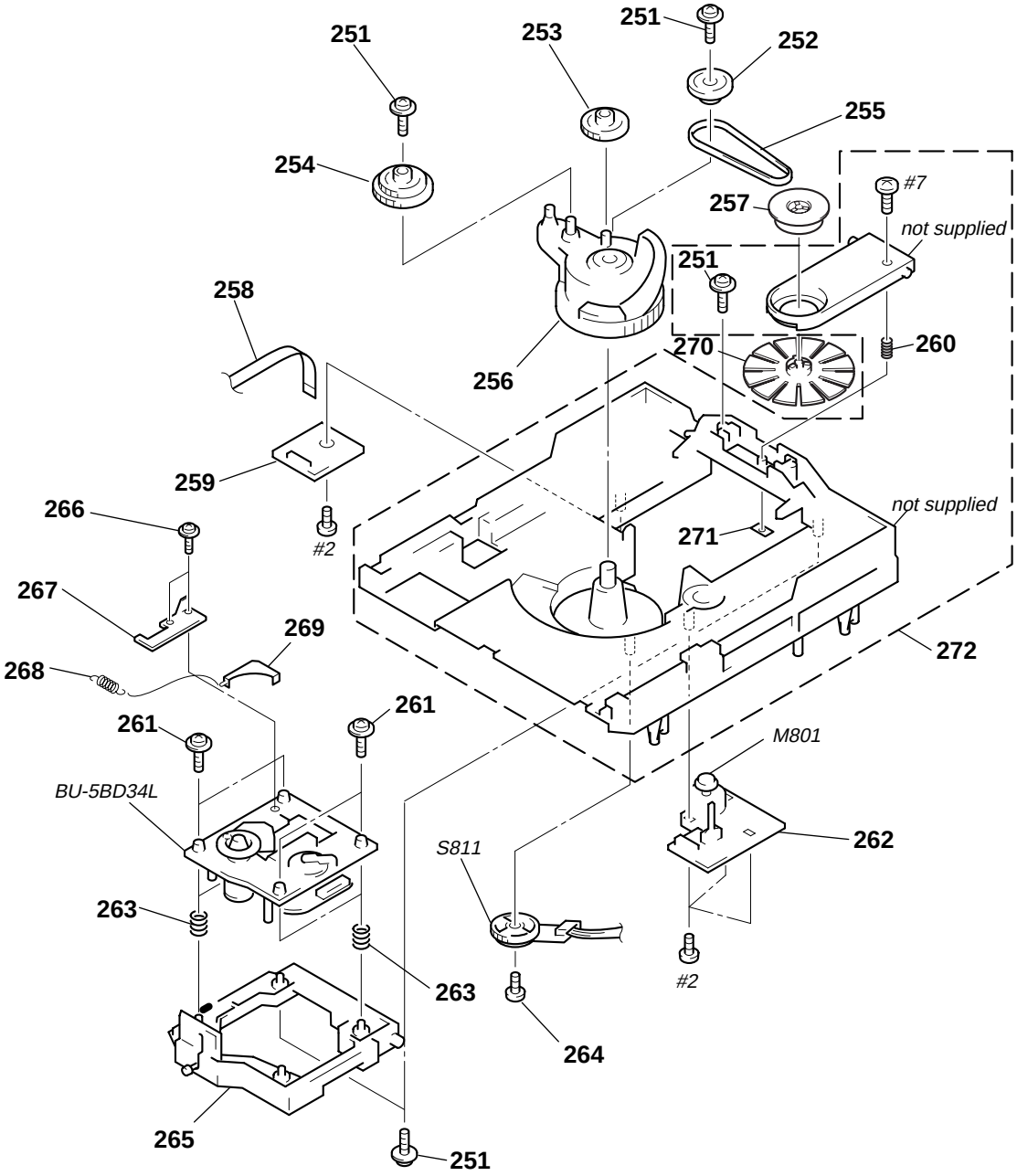
Ref. No.	Part No.	Description	Remark
112	4-962-708-81	EMBLEM (4-A), SONY	
113	X-4950-866-1	PANEL ASSY, FRONT (SILVER)	
113	X-4950-867-1	PANEL ASSY, FRONT (GRAY)	
114	A-4417-826-A	CD SW BOARD, COMPLETE	
115	4-214-385-11	KNOB (MIC) (SILVER)	
115	4-214-385-41	KNOB (MIC) (GRAY)	
116	1-773-189-11	WIRE (FLAT TYPE) (23 CORE)	
117	4-214-439-01	HOLDER, FL TUBE	
118	A-4417-959-A	PANEL BOARD, COMPLETE	
119	X-4951-444-1	PANEL ASSY, SUB (SILVER)	
119	X-4951-445-1	PANEL ASSY, SUB (GRAY)	
* 120	4-949-935-81	CUSHION (FL)	
121	1-674-232-11	PUSH CATCH STOP BOARD	
122	4-949-302-91	WASHER	
FL601	1-517-831-31	INDICATOR TUBE, FLUORESCENT	

8-4. CD MECHANISM DECK SECTION-1 (CDM38L-5BD34L)



Ref. No.	Part No.	Description	Remark
201	4-981-789-01	BRACKET (2), YOKE	
202	4-977-945-01	TRAY (TURN)	
203	X-4946-665-1	SHAFT ASSY, WORM	
204	4-977-943-01	BELT (TURN) (1.2)	
205	4-977-956-01	WHEEL, WORM	
* 206	1-658-577-11	MOTOR (TURN) BOARD	
207	4-988-162-01	ROLLER	
208	4-977-941-01	BEARING (WORM)	
* 209	1-658-576-11	SENSOR BOARD	
210	4-934-376-01	SHAFT (ROLLER)	
211	4-981-187-01	COLLAR (WORM)	
212	4-977-944-01	TRAY (SLIDE)	
M701	A-4672-004-A	MOTOR ASSY (TURN)	

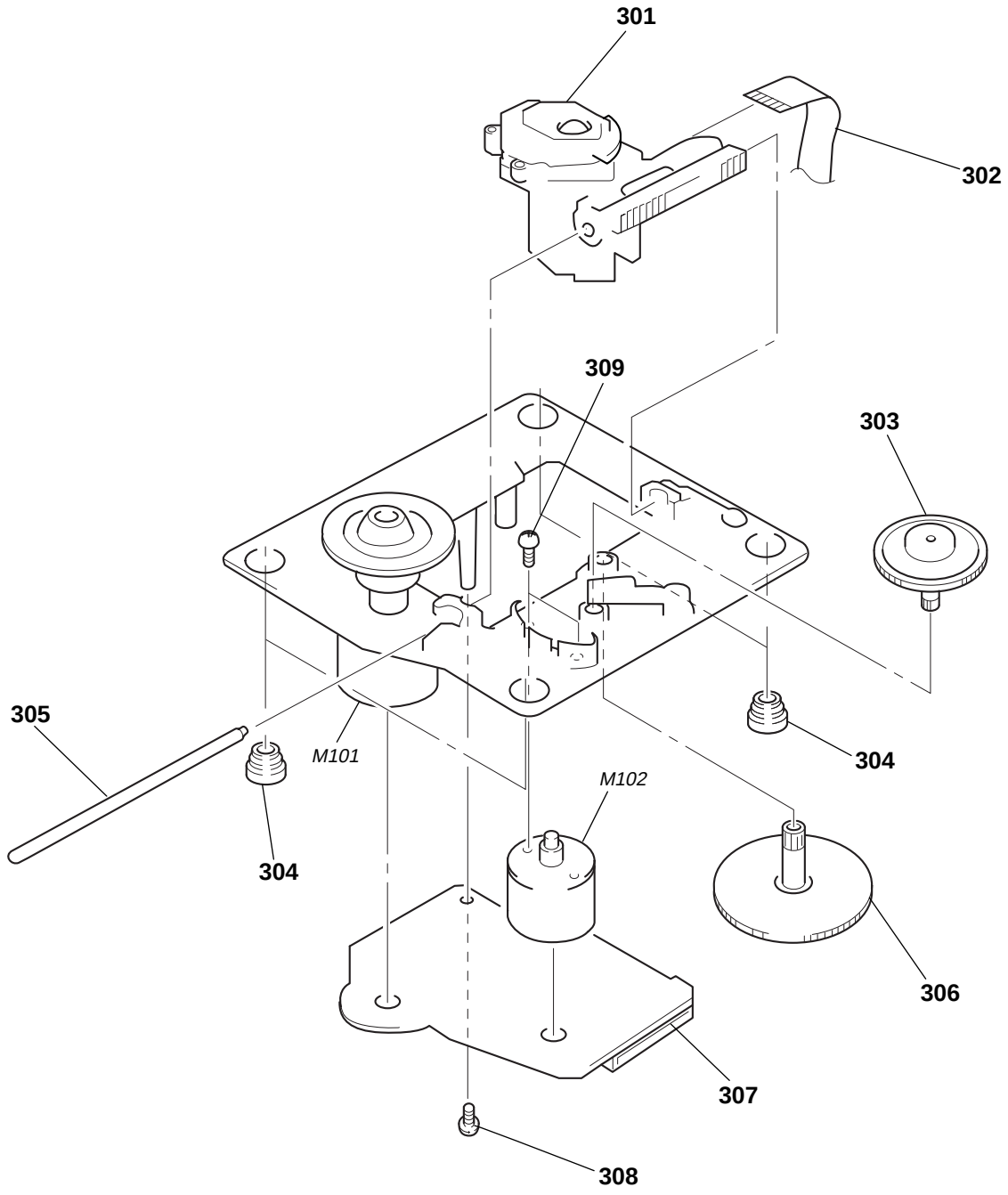
8-5. CD MECHANISM DECK SECTION-2 (CDM38L-5BD34L)



Ref. No.	Part No.	Description	Remark
251	4-917-583-71	BRACKET, YOKE	
252	4-977-954-01	PULLEY (SL)	
253	4-977-953-01	GEAR (SL-A)	
254	4-977-955-01	GEAR (SL-B)	
255	4-977-942-01	BELT (SL) (1.4)	
256	X-4946-667-1	CAM ASSY, BU	
257	1-452-925-21	MAGNET ASSY	
258	1-776-042-11	WIRE (FLAT TYPE) (8 CORE)	
* 259	1-658-575-11	CONNECTOR BOARD	
260	4-900-743-01	SPRING, COMPRESSION	
261	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
* 262	1-658-578-11	MOTOR (SLIDE) BOARD	

Ref. No.	Part No.	Description	Remark
263	4-982-447-01	SPRING (BU), COMPRESSION	
264	4-951-620-41	SCREW (2.6), +BVTP	
* 265	X-4946-666-1	HOLDER (BU) ASSY	
266	4-989-494-01	SCREW (SLIDER), STEP	
267	4-989-492-11	SLIDER (38)	
268	4-989-819-02	SPRING, TENSION	
269	4-989-491-01	COVER, LENS	
270	4-993-142-03	PULLEY (L), PRESS	
271	4-900-718-01	BRACKET (ADJUSTMENT)	
272	X-4950-020-1	CHASSIS (CDM) ASSY	
S811	1-473-335-11	ENCODER, ROTARY	
M801	A-4672-004-A	MOTOR ASSY (SLIDE)	

8-6. BASE UNIT SECTION (BU-5BD34L)



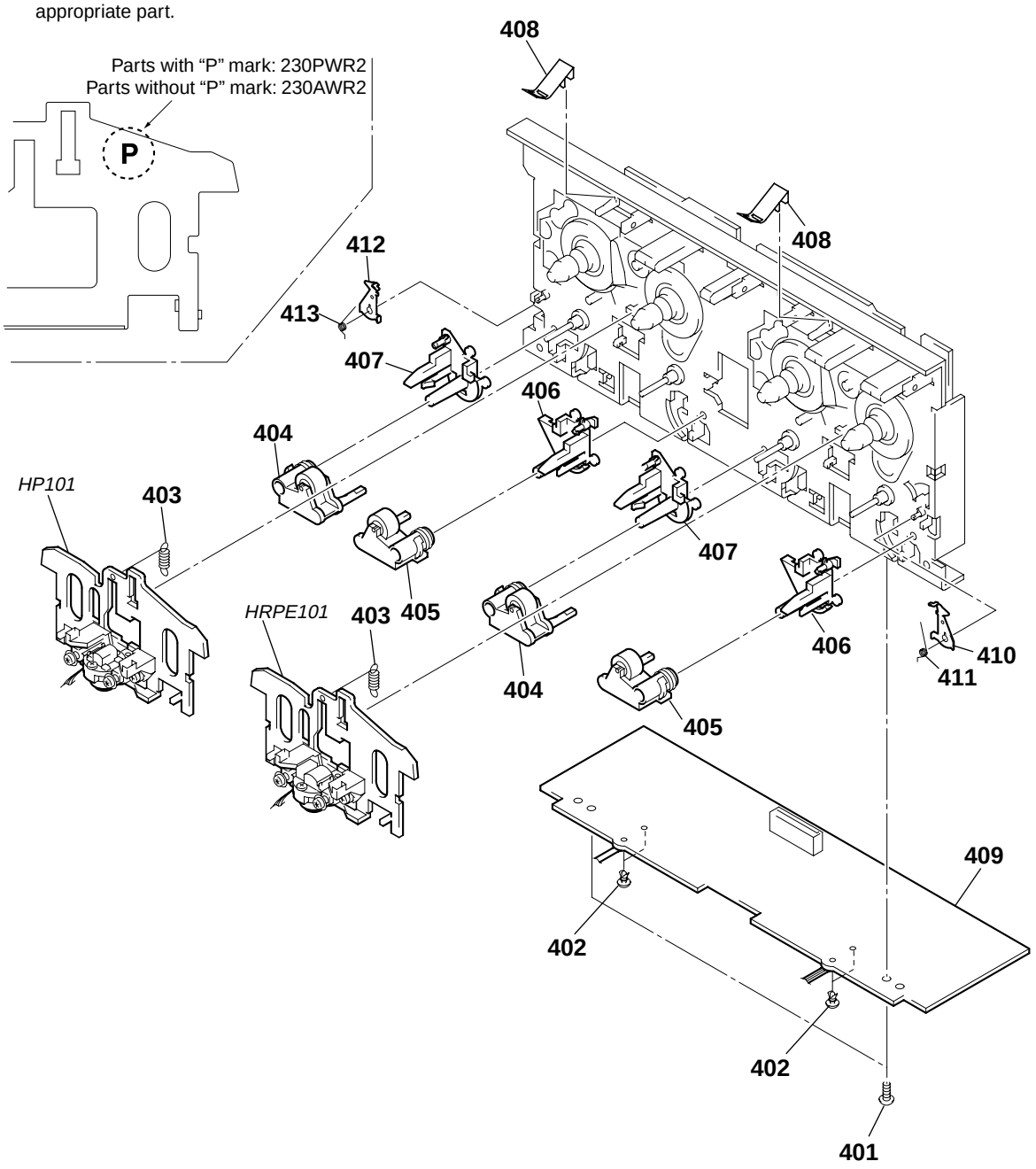
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
⚠301	8-820-020-02	OPTICAL PICK-UP KSS-213D/Q-NP	
302	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
303	4-917-567-21	GEAR (M)	
304	4-951-940-01	INSULATOR (BU)	
305	4-917-565-01	SHAFT, SLED	

Ref. No.	Part No.	Description	Remark
306	4-917-564-01	GEAR (P), FLATNESS	
307	A-4724-653-A	BD BOARD, COMPLETE	
308	4-951-620-01	SCREW (2.6X8), +BVTP	
309	3-713-786-51	SCREW +P 2X3	
M101	X-4917-523-3	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	

8-7. TC MECHANISM SECTION-1 (TCM230AWR2/230PWR2)

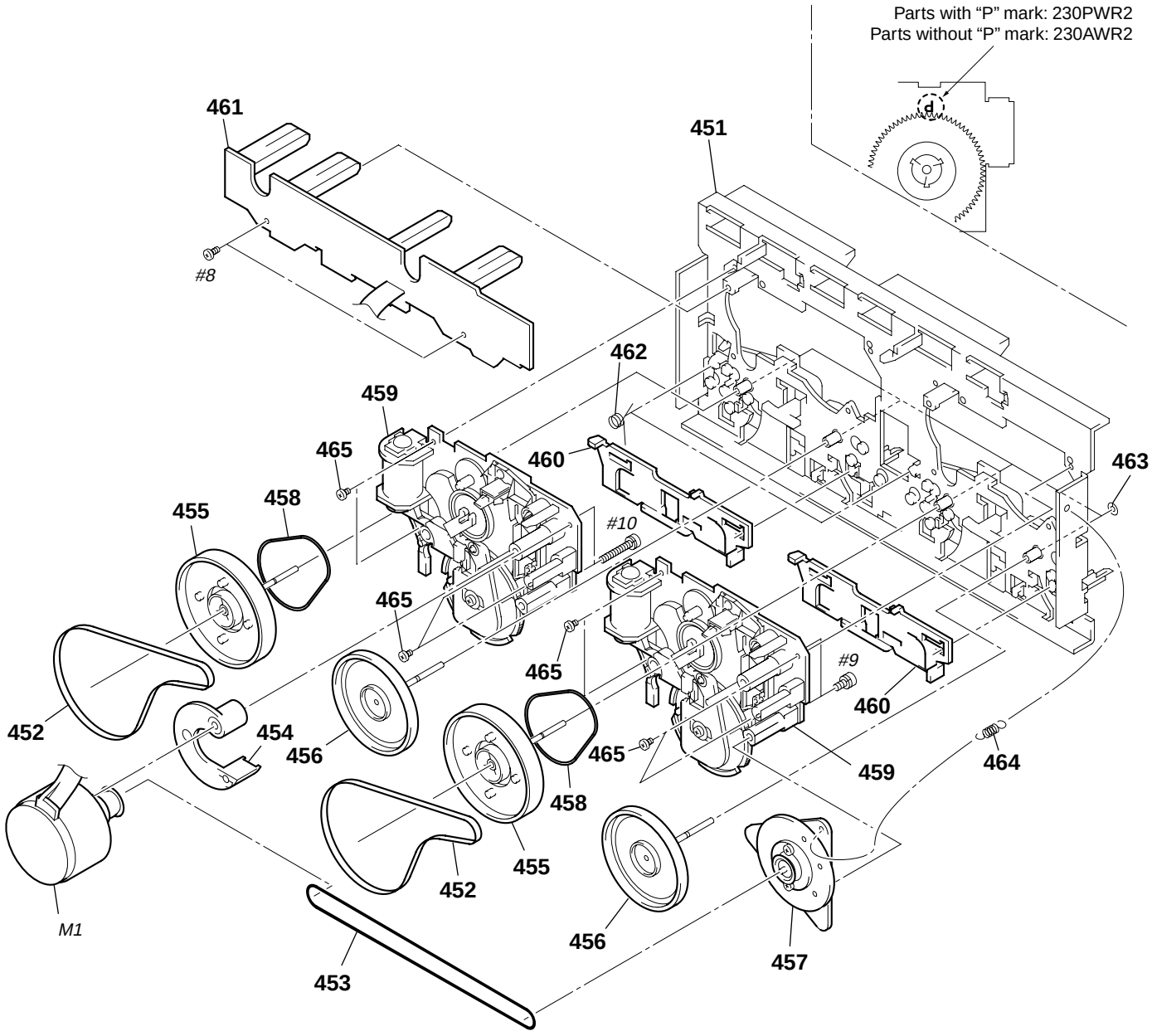
*NOTE: Two types of parts which are not interchangeable are available for the Head deck (A) ASSY and Head deck (B) ASSY. When replacing the parts, refer to the following figure, and use the appropriate part.



Ref. No.	Part No.	Description	Remark
401	3-376-464-11	SCREW(+PTT 2.6X6),GROUND POINT	
402	3-911-116-42	RIVET, PUSH	
403	3-016-574-01	SPRING (HEAD), TENSION	
404	X-3374-156-4	PINCH LEVER (REV) ASSY	
405	X-3374-155-4	PINCH LEVER (FWD) ASSY	
406	3-017-365-01	BASE (PINCH LEVER FWD)	
407	3-017-366-01	BASE (PINCH LEVER REV)	
408	3-026-892-01	SPRING (CASSETTE), LEAF	
409	A-2007-799-A	AUDIO BOARD, COMPLETE	
410	3-016-573-01	LEVER (EJECT PREVENTION R)	
411	3-032-810-02	SPRING (R), TORSION	
412	3-016-572-01	LEVER (EJECT PREVENTION L)	
413	3-032-809-02	SPRING (L), TORSION	
HP101	A-2056-681-B	DECK (A) ASSY, HEAD (230AWR2)(*NOTE)	
HP101	A-2056-683-B	DECK (A) ASSY, HEAD (230PWR2)(*NOTE)	
HRPE101	A-2056-682-B	DECK (B) ASSY, HEAD (230AWR2)(*NOTE)	
HRPE101	A-2056-684-B	DECK (B) ASSY, HEAD (230PWR2)(*NOTE)	

8-8. TC MECHANISM SECTION-2 (TCM230AWR2/230PWR2)

*NOTE: Two types of parts which are not interchangeable are available for the mechanical block assembly. When replacing the parts, refer to the following figure, and use the appropriate part.



Ref. No.	Part No.	Description	Remark
451	X-3374-214-1	CHASSIS ASSY, MAIN	
452	3-016-570-01	BELT (CAPSTAN)	
453	3-016-569-01	BELT (TENSION)	
* 454	3-016-568-01	BRACKET (MOTOR)	
455	X-3374-075-5	FLYWHEEL (FWD) ASSY	
456	X-3374-076-1	FLYWHEEL (REV) ASSY	
457	X-3374-157-1	PULLEY ASSY, TENSION	
458	3-024-405-01	BELT (FR2)	
459	A-2004-629-A	MECHANICAL BLOCK ASSY (230AWR2)(*NOTE)	

Ref. No.	Part No.	Description	Remark
459	A-2004-630-A	MECHANICAL BLOCK ASSY (230PWR2)(*NOTE)	
460	3-016-566-01	SLIDER, REVERSE	
461	A-2007-800-A	LEAF SW BOARD, COMPLETE	
462	3-016-575-01	SPRING, TORSION	
463	3-019-208-01	WASHER, STOPPER	
464	3-027-453-01	SPRING (GROUND), TENSION	
465	3-030-823-01	SCREW (+BVTT) (2X3.5)	
M1	A-2004-628-A	MOTOR ASSY, CAPSTAN	

SECTION 9
ELECTRICAL PARTS LIST

3CH AMP

Note:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: µ , for example:
  uA...: µ A..., uPA...: µ PA..., uPB...: µ PB..., uPC...: µ PC..., uPD...: µ PD...
- CAPACITORS
  uF : µ F
- COILS
  uH : µ H
- Abbreviation
  EA : Saudi Arabia model
  SP : Singapore model
  MY : Malaysia model
  IA : Indonesia model
  TH : Thai model

Ref. No.	Part No.	Description			Remark
	A-4417-794-A	3CH AMP BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1001	1-126-963-11	ELECT	4.7uF	20%	50V
C1002	1-162-286-21	CERAMIC	220PF	10%	50V
C1003	1-162-282-31	CERAMIC	100PF	10%	50V
C1004	1-104-664-11	ELECT	47uF	20%	10V
C1005	1-128-560-11	ELECT	22uF	20%	100V
C1006	1-136-165-00	FILM	0.1uF	5%	50V
C1007	1-136-495-11	FILM	0.068uF	5%	50V
C1008	1-136-495-11	FILM	0.068uF	5%	50V
C1022	1-162-306-11	CERAMIC	0.01uF	20%	16V
C1051	1-126-963-11	ELECT	4.7uF	20%	50V
C1052	1-162-286-21	CERAMIC	220PF	10%	50V
C1053	1-162-282-31	CERAMIC	100PF	10%	50V
C1054	1-104-664-11	ELECT	47uF	20%	10V
C1055	1-128-560-11	ELECT	22uF	20%	100V
C1056	1-136-165-00	FILM	0.1uF	5%	50V
C1057	1-136-495-11	FILM	0.068uF	5%	50V
C1058	1-136-495-11	FILM	0.068uF	5%	50V
C1081	1-126-963-11	ELECT	4.7uF	20%	50V
C1082	1-162-286-21	CERAMIC	220PF	10%	50V
C1083	1-162-282-31	CERAMIC	100PF	10%	50V
C1084	1-104-664-11	ELECT	47uF	20%	10V
C1085	1-136-495-11	FILM	0.068uF	5%	50V
C1086	1-136-495-11	FILM	0.068uF	5%	50V
		< CONNECTOR >			
CN1001	1-691-767-11	PLUG (MICRO CONNECTOR) 5P			
CN1002	1-691-772-11	PLUG (MICRO CONNECTOR) 10P			
		< DIODE >			
D1001	8-719-991-33	DIODE 1SS133T-77			
D1021	8-719-991-33	DIODE 1SS133T-77			
D1051	8-719-991-33	DIODE 1SS133T-77			
D1081	8-719-991-33	DIODE 1SS133T-77			
		< IC >			
IC1001	8-749-015-54	IC STK408-040E			
		< TRANSISTOR >			
Q1001	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA			
Q1021	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q1022	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q1023	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA			
Q1024	8-729-119-78	TRANSISTOR 2SC403SP-51			

Ref. No.	Part No.	Description			Remark
Q1051	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA			
Q1081	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA			
		< RESISTOR >			
R1001	1-249-417-11	CARBON	1K	5%	1/4W F
R1002	1-249-438-11	CARBON	56K	5%	1/4W
R1003	1-249-412-11	CARBON	390	5%	1/4W F
R1004	1-249-438-11	CARBON	56K	5%	1/4W
⚠R1005	1-212-881-11	FUSIBLE	100	5%	1/4W F
⚠R1006	1-217-151-00	METAL	0.22	10%	2W
R1007	1-249-417-11	CARBON	1K	5%	1/4W F
R1008	1-249-431-11	CARBON	15K	5%	1/4W
R1009	1-249-441-11	CARBON	100K	5%	1/4W
R1010	1-260-076-11	CARBON	10	5%	1/2W
R1020	1-247-863-91	CARBON	22K	5%	1/4W
R1021	1-249-435-11	CARBON	33K	5%	1/4W
R1022	1-247-863-91	CARBON	22K	5%	1/4W
R1023	1-249-439-11	CARBON	68K	5%	1/4W
R1024	1-249-441-11	CARBON	100K	5%	1/4W F
R1025	1-247-863-91	CARBON	22K	5%	1/4W
R1026	1-249-429-11	CARBON	10K	5%	1/4W
R1027	1-249-441-11	CARBON	100K	5%	1/4W F
⚠R1028	1-202-972-61	FUSIBLE	1	5%	1/4W F
R1029	1-249-441-11	CARBON	100K	5%	1/4W
R1030	1-249-441-11	CARBON	100K	5%	1/4W
R1031	1-249-437-11	CARBON	47K	5%	1/4W
R1051	1-249-417-11	CARBON	1K	5%	1/4W F
R1052	1-249-438-11	CARBON	56K	5%	1/4W
R1053	1-249-412-11	CARBON	390	5%	1/4W F
R1054	1-249-438-11	CARBON	56K	5%	1/4W
⚠R1055	1-212-881-11	FUSIBLE	100	5%	1/4W F
⚠R1056	1-217-151-00	METAL	0.22	10%	2W
R1057	1-249-417-11	CARBON	1K	5%	1/4W F
R1058	1-249-431-11	CARBON	15K	5%	1/4W
R1059	1-249-441-11	CARBON	100K	5%	1/4W
R1060	1-260-076-11	CARBON	10	5%	1/2W
R1081	1-249-417-11	CARBON	1K	5%	1/4W F
R1082	1-249-438-11	CARBON	56K	5%	1/4W
R1083	1-249-442-11	CARBON	510	5%	1/4W
R1084	1-249-438-11	CARBON	56K	5%	1/4W
R1085	1-217-151-00	METAL	0.22	10%	2W
R1086	1-249-417-11	CARBON	1K	5%	1/4W F
R1087	1-249-431-11	CARBON	15K	5%	1/4W
R1088	1-249-441-11	CARBON	100K	5%	1/4W
R1089	1-260-076-11	CARBON	10	5%	1/2W

Ref. No.	Part No.	Description			Remark
		< THERMISTOR >			
TH1021	1-807-796-11	THERMISTOR			
**********					
	A-2007-799-A	AUDIO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C301	1-162-289-31	CERAMIC	390PF	10%	50V
C302	1-126-968-11	ELECT	100uF	20%	6.3V
C303	1-162-282-31	CERAMIC	100PF	10%	50V
C304	1-130-483-00	MYLAR	0.01uF	5%	50V
C305	1-107-715-11	ELECT	22uF	20%	16V
C311	1-162-289-31	CERAMIC	390PF	10%	50V
C313	1-162-282-31	CERAMIC	100PF	10%	50V
C314	1-130-487-00	MYLAR	0.022uF	5%	50V
C315	1-126-233-11	ELECT	22uF	20%	50V
C331	1-137-427-11	FILM	120PF	5%	50V
C332	1-162-288-31	CERAMIC	330PF	10%	50V
C333	1-162-209-31	CERAMIC	27PF	5%	50V
C401	1-162-289-31	CERAMIC	390PF	10%	50V
C402	1-126-968-11	ELECT	100uF	20%	6.3V
C403	1-162-282-31	CERAMIC	100PF	10%	50V
C404	1-130-483-00	MYLAR	0.01uF	5%	50V
C405	1-107-715-11	ELECT	22uF	20%	16V
C411	1-162-289-31	CERAMIC	390PF	10%	50V
C413	1-162-282-31	CERAMIC	100PF	10%	50V
C414	1-130-487-00	MYLAR	0.022uF	5%	50V
C415	1-126-233-11	ELECT	22uF	20%	50V
C431	1-137-427-11	FILM	120PF	5%	50V
C432	1-162-288-31	CERAMIC	330PF	10%	50V
C433	1-162-209-31	CERAMIC	27PF	5%	50V
C601	1-104-396-11	ELECT	10uF	20%	16V
C602	1-104-396-11	ELECT	10uF	20%	16V
C611	1-104-396-11	ELECT	10uF	20%	16V
C612	1-104-396-11	ELECT	10uF	20%	16V
C621	1-137-150-11	FILM	0.01uF	5%	100V
C622	1-126-961-11	ELECT	2.2uF	20%	50V
C623	1-136-155-00	FILM	0.015uF	5%	50V
C624	1-130-481-00	MYLAR	0.0068uF	5%	50V
C625	1-130-481-00	MYLAR	0.0068uF	5%	50V
C627	1-124-903-11	ELECT	1uF	20%	50V
C628	1-136-153-00	FILM	0.01uF	5%	50V
C642	1-104-664-11	ELECT	47uF	20%	16V
		< CONNECTOR >			
CN601	1-695-338-11	PIN, CONNECTOR (PC BOARD) 15P			
		< IC >			
IC601	8-759-111-44	IC UPC4570C-1			
IC602	8-759-143-54	IC UPC1330HA			
IC611	8-759-111-44	IC UPC4570C-1			
		< COIL >			
L331	1-410-780-11	INDUCTOR	27mH		
L431	1-410-780-11	INDUCTOR	27mH		
L601	1-414-193-41	INDUCTOR	220uH		
L602	1-414-193-41	INDUCTOR	220uH		
		< TRANSISTOR >			
Q621	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q622	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q623	8-729-801-93	TRANSISTOR	2SD1387		
		< RESISTOR >			
R301	1-247-881-00	CARBON	120K	5%	1/4W
R302	1-247-815-91	CARBON	220	5%	1/4W
R303	1-247-863-91	CARBON	22K	5%	1/4W
R304	1-247-889-00	CARBON	270K	5%	1/4W
R305	1-247-858-11	CARBON	13K	5%	1/4W
R311	1-247-881-00	CARBON	120K	5%	1/4W
R312	1-247-807-31	CARBON	100	5%	1/4W
R314	1-247-882-11	CARBON	130K	5%	1/4W
R315	1-247-850-11	CARBON	6.2K	5%	1/4W
R331	1-249-430-11	CARBON	12K	5%	1/4W
R401	1-247-881-00	CARBON	120K	5%	1/4W
R402	1-247-815-91	CARBON	220	5%	1/4W
R403	1-247-863-91	CARBON	22K	5%	1/4W
R404	1-247-889-00	CARBON	270K	5%	1/4W
R405	1-247-858-11	CARBON	13K	5%	1/4W
R411	1-247-881-00	CARBON	120K	5%	1/4W
R412	1-247-807-31	CARBON	100	5%	1/4W
R414	1-247-882-11	CARBON	130K	5%	1/4W
R415	1-247-850-11	CARBON	6.2K	5%	1/4W
R431	1-249-430-11	CARBON	12K	5%	1/4W
R601	1-247-815-91	CARBON	220	5%	1/4W
R602	1-247-815-91	CARBON	220	5%	1/4W
R608	1-247-815-91	CARBON	220	5%	1/4W
R609	1-247-863-91	CARBON	22K	5%	1/4W
R611	1-247-815-91	CARBON	220	5%	1/4W
R612	1-247-815-91	CARBON	220	5%	1/4W
⚠R621	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
⚠R622	1-212-851-00	FUSIBLE	5.6	5%	1/4W F
R623	1-249-432-11	CARBON	18K	5%	1/4W
R624	1-249-432-11	CARBON	18K	5%	1/4W
R625	1-249-429-11	CARBON	10K	5%	1/4W
		< VARIABLE RESISTOR >			
RV301	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV311	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV341	1-241-768-11	RES, ADJ, CARBON 220K			
RV401	1-238-598-11	RES, ADJ, CARBON 2.2K			
RV411	1-238-598-11	RES, ADJ, CARBON 2.2K			
		< TRANSFORMER >			
T621	1-423-980-11	TRANSFORMER, BIAS OSCILLATION			
**********					

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

BD

Ref. No.	Part No.	Description			Remark
	A-4724-653-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C102	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C103	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C105	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C106	1-164-346-11	CERAMIC CHIP	1uF		16V
C107	1-164-346-11	CERAMIC CHIP	1uF		16V
C108	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C109	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V
C110	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V
C111	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C112	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C113	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C115	1-126-607-11	ELECT CHIP	47uF	20%	4V
C116	1-126-607-11	ELECT CHIP	47uF	20%	4V
C117	1-126-209-11	ELECT CHIP	100uF	20%	4V
C118	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C119	1-163-110-00	CERAMIC CHIP	51PF	5%	50V
C120	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C121	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C122	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C123	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C124	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C126	1-124-779-00	ELECT CHIP	10uF	20%	16V
C130	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C140	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C141	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C151	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C153	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C154	1-110-501-11	CERAMIC CHIP	0.33uF	10%	16V
C156	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C157	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C159	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C161	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C162	1-128-065-11	ELECT CHIP	68uF	20%	10V
C170	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C171	1-163-038-91	CERAMIC CHIP	0.1uF		25V
		< CONNECTOR >			
CN101	1-770-706-11	CONNECTOR, FFC/FPC 23P			
CN102	1-777-937-11	CONNECTOR, FFC/FPC 16P			
		< IC >			
IC101	8-752-397-42	IC CXD3008Q			
IC102	8-759-549-28	IC BA5974FP-E2			
IC103	8-752-085-51	IC CXA2568M-T6			
IC104	8-759-398-25	IC TC7SH04F(TE85L)			
		< COIL >			
L101	1-414-234-22	INDUCTOR CHIP	0uH		
L102	1-410-377-31	INDUCTOR CHIP	4.7uH		

Ref. No.	Part No.	Description			Remark
		< TRANSISTOR >			
Q101	8-729-010-08	TRANSISTOR MSB710-R			
		< RESISTOR >			
R101	1-216-077-00	METAL CHIP	15K	5%	1/10W
R102	1-216-097-91	RES,CHIP	100K	5%	1/10W
R103	1-216-077-00	METAL CHIP	15K	5%	1/10W
R104	1-216-085-00	METAL CHIP	33K	5%	1/10W
R105	1-216-073-00	METAL CHIP	10K	5%	1/10W
R106	1-216-049-91	RES,CHIP	1K	5%	1/10W
R107	1-216-073-00	METAL CHIP	10K	5%	1/10W
R108	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R109	1-216-121-91	RES,CHIP	1M	5%	1/10W
R110	1-216-295-91	SHORT	0		
R112	1-216-049-91	RES,CHIP	1K	5%	1/10W
R123	1-216-073-00	METAL CHIP	10K	5%	1/10W
R124	1-216-097-91	RES,CHIP	100K	5%	1/10W
R125	1-216-037-00	METAL CHIP	330	5%	1/10W
R126	1-216-037-00	METAL CHIP	330	5%	1/10W
R127	1-216-037-00	METAL CHIP	330	5%	1/10W
R131	1-216-037-00	METAL CHIP	330	5%	1/10W
R135	1-216-295-91	SHORT	0		
R136	1-216-295-91	SHORT	0		
R137	1-216-295-91	SHORT	0		
R138	1-216-295-91	SHORT	0		
R143	1-216-103-00	METAL CHIP	180K	5%	1/10W
R144	1-216-103-00	METAL CHIP	180K	5%	1/10W
R145	1-216-121-91	RES,CHIP	1M	5%	1/10W
R146	1-216-121-91	RES,CHIP	1M	5%	1/10W
R147	1-216-041-00	METAL CHIP	470	5%	1/10W
R148	1-216-001-00	METAL CHIP	10	5%	1/10W
R149	1-216-003-11	RES,CHIP	12	5%	1/10W
R150	1-216-073-00	METAL CHIP	10K	5%	1/10W
R154	1-216-025-91	RES,CHIP	100	5%	1/10W
R155	1-216-025-91	RES,CHIP	100	5%	1/10W
R156	1-216-025-91	RES,CHIP	100	5%	1/10W
R157	1-216-025-91	RES,CHIP	100	5%	1/10W
R158	1-216-111-00	METAL CHIP	390K	5%	1/10W
R159	1-216-089-91	RES,CHIP	47K	5%	1/10W
R161	1-216-308-00	METAL CHIP	4.7	5%	1/10W
R162	1-216-101-00	METAL CHIP	150K	5%	1/10W
R171	1-216-025-91	RES,CHIP	100	5%	1/10W
R172	1-216-025-91	RES,CHIP	100	5%	1/10W
R173	1-216-025-91	RES,CHIP	100	5%	1/10W
R175	1-216-025-91	RES,CHIP	100	5%	1/10W
R203	1-216-025-91	RES,CHIP	100	5%	1/10W
R204	1-216-025-91	RES,CHIP	100	5%	1/10W
R205	1-216-025-91	RES,CHIP	100	5%	1/10W
R206	1-216-295-91	SHORT	0		
		< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF (LIMIT SW)			

****

Ref. No.	Part No.	Description			Remark
	A-4417-826-A	CD-SW BOARD, COMPLETE			
		**********			
		< DIODE >			
D751	8-719-056-13	DIODE SML79423C-TP15 (DISC 1)			
D752	8-719-056-13	DIODE SML79423C-TP15 (DISC 2)			
D753	8-719-056-13	DIODE SML79423C-TP15 (DISC 3)			
D754	8-719-063-93	DIODE SLR325VC-N-T32 (I/⏻)			
		< RESISTOR >			
R751	1-249-417-11	CARBON	1K	5%	1/4W F
R752	1-249-418-11	CARBON	1.2K	5%	1/4W F
R753	1-249-420-11	CARBON	1.8K	5%	1/4W F
R754	1-249-422-11	CARBON	2.7K	5%	1/4W F
R755	1-247-843-11	CARBON	3.3K	5%	1/4W
R756	1-249-425-11	CARBON	4.7K	5%	1/4W F
R757	1-249-427-11	CARBON	6.8K	5%	1/4W F
R758	1-247-804-11	CARBON	75	5%	1/4W
R759	1-249-407-11	CARBON	150	5%	1/4W F
R760	1-247-804-11	CARBON	75	5%	1/4W
R761	1-249-407-11	CARBON	150	5%	1/4W F
R762	1-247-804-11	CARBON	75	5%	1/4W
R763	1-249-407-11	CARBON	150	5%	1/4W F
R764	1-249-414-11	CARBON	560	5%	1/4W F
		< SWITCH >			
S751	1-762-875-21	SWITCH, KEYBOARD (I/⏻)			
S752	1-762-875-21	SWITCH, KEYBOARD (DEMO (STANDBY))			
S753	1-762-875-21	SWITCH, KEYBOARD (DISC 1)			
S754	1-762-875-21	SWITCH, KEYBOARD (DISC 2)			
S755	1-762-875-21	SWITCH, KEYBOARD (DISC 3)			
S756	1-762-875-21	SWITCH, KEYBOARD (EXCHANGE DISC SKIP)			
S757	1-762-875-21	SWITCH, KEYBOARD (⏏)			
**********					
*	1-658-575-11	CONNECTOR BOARD			
		**********			
		< CONNECTOR >			
* CN701	1-568-946-11	PIN, CONNECTOR 8P			
CN702	1-750-413-11	CONNECTOR, FFC/FPC 8P			
		< TRANSISTOR >			
Q701	8-729-900-80	TRANSISTOR DTC114ES			
		< RESISTOR >			
R703	1-249-435-11	CARBON	33K	5%	1/4W
R704	1-249-429-11	CARBON	10K	5%	1/4W
R705	1-249-417-11	CARBON	1K	5%	1/4W F
**********					
	A-4426-201-A	FRONT AMP BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C801	1-126-963-11	ELECT	4.7uF	20%	50V

Ref. No.	Part No.	Description			Remark
C802	1-162-286-21	CERAMIC	220PF	10%	50V
C803	1-162-282-31	CERAMIC	100PF	10%	50V
C804	1-104-664-11	ELECT	47uF	20%	10V
C806	1-128-560-11	ELECT	22uF	20%	100V
C807	1-130-777-00	FILM	0.1uF	10%	100V
C808	1-136-495-11	FILM	0.068uF	5%	50V
C809	1-136-495-11	FILM	0.068uF	5%	50V
C821	1-126-960-11	ELECT	1uF	20%	50V
C822	1-162-306-11	CERAMIC	0.01uF	20%	16V
C825	1-104-665-11	ELECT	100uF	20%	10V
C826	1-126-961-11	ELECT	2.2uF	20%	50V
C827	1-104-665-11	ELECT	100uF	20%	10V
C831	1-126-563-11	ELECT	100uF	20%	100V
C851	1-126-963-11	ELECT	4.7uF	20%	50V
C852	1-162-286-21	CERAMIC	220PF	10%	50V
C853	1-162-282-31	CERAMIC	100PF	10%	50V
C854	1-104-664-11	ELECT	47uF	20%	10V
C856	1-128-560-11	ELECT	22uF	20%	100V
C857	1-130-777-00	FILM	0.1uF	10%	100V
C858	1-136-495-11	FILM	0.068uF	5%	50V
C859	1-136-495-11	FILM	0.068uF	5%	50V
C880	1-126-963-11	ELECT	4.7uF	20%	50V
C881	1-127-751-11	ELECT	3300uF	20%	50V
C882	1-127-751-11	ELECT	3300uF	20%	50V
C883	1-127-753-11	ELECT	3300uF	20%	71V
C884	1-127-753-11	ELECT	3300uF	20%	71V
C885	1-136-165-00	FILM	0.1uF	5%	50V
C886	1-136-165-00	FILM	0.1uF	5%	50V
C887	1-130-777-00	FILM	0.1uF	10%	100V
C888	1-130-777-00	FILM	0.1uF	10%	100V
C889	1-164-159-21	CERAMIC	0.1uF		50V
C890	1-164-159-21	CERAMIC	0.1uF		50V
		< CONNECTOR >			
CN801	1-770-722-11	CONNECTOR, BOARD TO BOARD 6P			
CN802	1-778-981-11	CONNECTOR, BOARD TO BOARD 13P			
		< DIODE >			
D801	8-719-110-09	DIODE RD8.2ES-B3			
D802	8-719-991-33	DIODE 1SS133T-77			
D821	8-719-991-33	DIODE 1SS133T-77			
D831	8-719-991-33	DIODE 1SS133T-77			
D851	8-719-110-09	DIODE RD8.2ES-B3			
D852	8-719-991-33	DIODE 1SS133T-77			
D871	8-719-991-33	DIODE 1SS133T-77			
D881	8-719-510-68	DIODE D5SBA20F01			
D882	8-719-510-68	DIODE D5SBA20F01			
D883	8-719-991-33	DIODE 1SS133T-77			
D884	8-719-991-33	DIODE 1SS133T-77			
D885	8-719-991-33	DIODE 1SS133T-77			
		< GROUND PLATE >			
* EP802	1-537-738-21	TERMINAL, EARTH			
		< IC >			
IC801	8-749-016-11	IC STK411-230M			

FRONT AMP LEAF SW

Ref. No.	Part No.	Description				Remark
		< TRANSISTOR >				
Q801	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q821	8-729-140-82	TRANSISTOR	2SA988-PAFAEA			
Q822	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q825	8-729-119-78	TRANSISTOR	2SC403SP-51			
Q826	8-729-119-78	TRANSISTOR	2SC403SP-51			
Q827	8-729-119-78	TRANSISTOR	2SC403SP-51			
Q828	8-729-140-82	TRANSISTOR	2SA988-PAFAEA			
Q829	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q830	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q831	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q832	8-729-119-78	TRANSISTOR	2SC403SP-51			
Q851	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q881	8-729-140-82	TRANSISTOR	2SA988-PAFAEA			
Q882	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q883	8-729-140-82	TRANSISTOR	2SA988-PAFAEA			
Q884	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q885	8-729-140-82	TRANSISTOR	2SA988-PAFAEA			
Q886	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
		< RESISTOR >				
R801	1-249-417-11	CARBON	1K	5%	1/4W	F
R802	1-249-438-11	CARBON	56K	5%	1/4W	
R803	1-249-416-11	CARBON	820	5%	1/4W	F
R804	1-249-438-11	CARBON	56K	5%	1/4W	
⚠R805	1-212-881-11	FUSIBLE	100	5%	1/4W	F
R806	1-260-335-11	CARBON	3.9K	5%	1/2W	
⚠R807	1-217-156-00	METAL	0.22	10%	5W	
R808	1-249-417-11	CARBON	1K	5%	1/4W	F
R809	1-249-431-11	CARBON	15K	5%	1/4W	
R810	1-249-441-11	CARBON	100K	5%	1/4W	
R811	1-260-076-11	CARBON	10	5%	1/2W	
R814	1-249-437-11	CARBON	47K	5%	1/4W	
R821	1-249-435-11	CARBON	33K	5%	1/4W	
R822	1-247-863-91	CARBON	22K	5%	1/4W	
R823	1-249-439-11	CARBON	68K	5%	1/4W	
R824	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R825	1-247-863-91	CARBON	22K	5%	1/4W	
R826	1-249-429-11	CARBON	10K	5%	1/4W	
R827	1-249-421-11	CARBON	2.2K	5%	1/4W	F
⚠R828	1-202-972-61	FUSIBLE	1	5%	1/4W	F
R832	1-249-431-11	CARBON	15K	5%	1/4W	
R833	1-249-435-11	CARBON	33K	5%	1/4W	
R835	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R836	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R837	1-247-863-91	CARBON	22K	5%	1/4W	
R838	1-249-435-11	CARBON	33K	5%	1/4W	
R839	1-249-429-11	CARBON	10K	5%	1/4W	
R840	1-249-429-11	CARBON	10K	5%	1/4W	
R841	1-249-437-11	CARBON	47K	5%	1/4W	
R842	1-249-438-11	CARBON	56K	5%	1/4W	
R843	1-249-439-11	CARBON	68K	5%	1/4W	
R844	1-249-438-11	CARBON	56K	5%	1/4W	
R845	1-249-437-11	CARBON	47K	5%	1/4W	
R851	1-249-417-11	CARBON	1K	5%	1/4W	F
R852	1-249-438-11	CARBON	56K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R853	1-249-416-11	CARBON	820	5%	1/4W	F
R854	1-249-438-11	CARBON	56K	5%	1/4W	
⚠R855	1-212-881-11	FUSIBLE	100	5%	1/4W	F
R856	1-260-335-11	CARBON	3.9K	5%	1/2W	
⚠R857	1-217-156-00	METAL	0.22	10%	5W	
R858	1-249-417-11	CARBON	1K	5%	1/4W	F
R859	1-249-431-11	CARBON	15K	5%	1/4W	
R860	1-249-441-11	CARBON	100K	5%	1/4W	
R861	1-260-076-11	CARBON	10	5%	1/2W	
R864	1-249-437-11	CARBON	47K	5%	1/4W	
R871	1-249-437-11	CARBON	47K	5%	1/4W	
R872	1-249-437-11	CARBON	47K	5%	1/4W	
R873	1-249-437-11	CARBON	47K	5%	1/4W	
R881	1-249-429-11	CARBON	10K	5%	1/4W	
R882	1-249-437-11	CARBON	47K	5%	1/4W	
R883	1-249-429-11	CARBON	10K	5%	1/4W	
R884	1-249-441-11	CARBON	100K	5%	1/4W	
⚠R885	1-215-893-11	METAL OXIDE	1.5K	5%	2W	F (TH)
⚠R885	1-216-457-00	METAL OXIDE	1.2K	5%	2W	F
R886	1-249-429-11	CARBON	10K	5%	1/4W	
R887	1-249-437-11	CARBON	47K	5%	1/4W	
R888	1-249-429-11	CARBON	10K	5%	1/4W	
R889	1-249-441-11	CARBON	100K	5%	1/4W	
⚠R890	1-215-893-11	METAL OXIDE	1.5K	5%	2W	F (TH)
⚠R890	1-216-457-00	METAL OXIDE	1.2K	5%	2W	F (E,EA,MY,SP,IA)
R891	1-249-429-11	CARBON	10K	5%	1/4W	
R892	1-249-437-11	CARBON	47K	5%	1/4W	
R893	1-249-429-11	CARBON	10K	5%	1/4W	
R894	1-249-441-11	CARBON	100K	5%	1/4W	
⚠R895	1-215-893-11	METAL OXIDE	1.5K	5%	2W	F (TH)
⚠R895	1-216-457-00	METAL OXIDE	1.2K	5%	2W	F (E,EA,MY,SP,IA)
R896	1-247-863-91	CARBON	22K	5%	1/4W	
R897	1-247-863-91	CARBON	22K	5%	1/4W	
		< RELAY >				
RY881	1-515-920-11	RELAY (TH)				
RY881	1-755-168-11	RELAY				
RY882	1-515-920-11	RELAY (24V)				
RY883	1-515-920-11	RELAY (24V)				
		< TERMINAL >				
TM801	1-537-240-11	TERMINAL BOARD (CHECKER PIN)				(FRONT SPEAKER)
TM802	1-537-510-11	TERMINAL BOARD (SPEAKER)(6P)				(SURROUND SPEAKER)
**********						
	A-2007-800-A	LEAF SW BOARD, COMPLETE				
		**********				
		< CAPACITOR >				
C1001	1-107-716-11	ELECT	33uF	20%	10V	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN1001	1-784-459-11	CONNECTOR, FFC/FPC 17P			
		< DIODE >			
D1001	8-719-991-33	DIODE 1SS133T-77			
D1002	8-719-991-33	DIODE 1SS133T-77			
		< CABLE HOLDER >			
* DM1001	1-784-581-11	HOLDER, CABLE (2.5MM PITCH) 4P			
		< IC >			
IC1001	8-749-014-38	IC PHOTO INTERRUPTER SG-264			
IC1002	8-749-014-38	IC PHOTO INTERRUPTER SG-264			
		< TRANSISTOR >			
Q1001	8-729-029-56	TRANSISTOR DTA144ESA			
		< RESISTOR >			
R907	1-249-441-11	CARBON	100K	5% 1/4W	
R1001	1-247-815-91	CARBON	220	5% 1/4W	
R1002	1-247-815-91	CARBON	220	5% 1/4W	
R1003	1-249-414-11	CARBON	560	5% 1/4W	F
R1004	1-247-834-11	CARBON	1.3K	5% 1/4W	
R1005	1-247-818-91	CARBON	300	5% 1/4W	
R1006	1-247-864-11	CARBON	24K	5% 1/4W	
R1007	1-247-856-00	CARBON	11K	5% 1/4W	
R1008	1-249-417-11	CARBON	1K	5% 1/4W	F
		< VARIABLE RESISTOR >			
RV1001	1-241-785-11	RES, ADJ, CARBON 10K (TAPE SPEED (NORMAL))			
RV1002	1-241-785-11	RES, ADJ, CARBON 10K (TAPE SPEED (HIGH))			
		< SWITCH >			
S1001	1-570-953-11	SWITCH, PUSH (1 KEY)(A PLAY)			
S1002	1-570-953-11	SWITCH, PUSH (1 KEY)(B PLAY)			
S1003	1-771-333-11	SWITCH, LEAF (A PLAY)			
S1004	1-771-205-11	SWITCH, LEAF (B PLAY)			
S1005	1-771-205-11	SWITCH, LEAF (A 120/70)			
S1006	1-771-333-11	SWITCH, LEAF (REC A)			
S1008	1-771-205-11	SWITCH, LEAF (REC B)			
S1009	1-771-205-11	SWITCH, LEAF (B 120/70)			
**********					
	A-4417-910-A	MAIN BOARD, COMPLETE (TH)			
		**********			
	A-4417-918-A	MAIN BOARD, COMPLETE (EA)			
		**********			
	A-4417-955-A	MAIN BOARD, COMPLETE (E,MY,SP,IA)			
		**********			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			

Ref. No.	Part No.	Description			Remark
		< CAPACITOR >			
C101	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C102	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C103	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C104	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C111	1-137-195-11	FILM	0.56uF	5%	50V
C112	1-136-158-00	FILM	0.027uF	5%	50V
C113	1-136-167-00	FILM	0.15uF	5%	50V
C114	1-130-480-00	MYLAR	0.0056uF	5%	50V
C115	1-136-159-00	FILM	0.033uF	5%	50V
C116	1-130-473-00	MYLAR	0.0015uF	5%	50V
C117	1-136-153-00	FILM	0.01uF	5%	50V
C118	1-110-341-11	MYLAR	330PF	5%	50V
C119	1-130-479-00	MYLAR	0.0047uF	5%	50V
C120	1-130-477-00	MYLAR	0.0033uF	5%	50V
C121	1-126-964-11	ELECT	10uF	20%	50V
C122	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C123	1-136-169-00	FILM	0.22uF	5%	50V
C124	1-136-169-00	FILM	0.22uF	5%	50V
C125	1-126-964-11	ELECT	10uF	20%	50V
C127	1-136-153-00	FILM	0.01uF	5%	50V
C128	1-136-495-11	FILM	0.068uF	5%	50V
C131	1-104-664-11	ELECT	47uF	20%	16V
C132	1-104-664-11	ELECT	47uF	20%	16V
C134	1-126-964-11	ELECT	10uF	20%	50V
C141	1-126-959-11	ELECT	0.47uF	20%	50V
C151	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C152	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C153	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C161	1-137-195-11	FILM	0.56uF	5%	50V
C162	1-136-158-00	FILM	0.027uF	5%	50V
C163	1-136-167-00	FILM	0.15uF	5%	50V
C164	1-130-480-00	MYLAR	0.0056uF	5%	50V
C165	1-136-159-00	FILM	0.033uF	5%	50V
C166	1-130-473-00	MYLAR	0.0015uF	5%	50V
C167	1-136-153-00	FILM	0.01uF	5%	50V
C168	1-110-341-11	MYLAR	330PF	5%	50V
C169	1-130-479-00	MYLAR	0.0047uF	5%	50V
C170	1-130-477-00	MYLAR	0.0033uF	5%	50V
C171	1-126-964-11	ELECT	10uF	20%	50V
C172	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C173	1-136-169-00	FILM	0.22uF	5%	50V
C174	1-136-169-00	FILM	0.22uF	5%	50V
C175	1-126-964-11	ELECT	10uF	20%	50V
C191	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C201	1-126-964-11	ELECT	10uF	20%	50V
C202	1-126-964-11	ELECT	10uF	20%	50V
C204	1-126-959-11	ELECT	0.47uF	20%	50V
C207	1-136-165-00	FILM	0.1uF	5%	50V
C208	1-136-165-00	FILM	0.1uF	5%	50V
C210	1-126-959-11	ELECT	0.47uF	20%	50V
C212	1-126-959-11	ELECT	0.47uF	20%	50V
C215	1-126-959-11	ELECT	0.47uF	20%	50V
C217	1-126-959-11	ELECT	0.47uF	20%	50V
C218	1-136-165-00	FILM	0.1uF	5%	50V
C219	1-163-038-91	CERAMIC CHIP	0.1uF		25V

MAIN

Ref. No.	Part No.	Description			Remark
C221	1-126-964-11	ELECT	10uF	20%	50V
C224	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C225	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C226	1-126-960-11	ELECT	1uF	20%	50V
C228	1-130-479-00	MYLAR	0.0047uF	5%	50V
C229	1-130-471-00	MYLAR	0.001uF	5%	50V
C233	1-136-169-00	FILM	0.22uF	5%	50V
C234	1-136-169-00	FILM	0.22uF	5%	50V
C237	1-130-479-00	MYLAR	0.0047uF	5%	50V
C238	1-130-471-00	MYLAR	0.001uF	5%	50V
C240	1-126-960-11	ELECT	1uF	20%	50V
C243	1-130-480-00	MYLAR	0.0056uF	5%	50V
C244	1-136-161-00	FILM	0.047uF	5%	50V
C245	1-136-175-00	FILM	0.68uF	5%	50V
C246	1-136-169-00	FILM	0.22uF	5%	50V
C247	1-136-169-00	FILM	0.22uF	5%	50V
C248	1-126-963-11	ELECT	4.7uF	20%	50V
C249	1-126-963-11	ELECT	4.7uF	20%	50V
C250	1-136-169-00	FILM	0.22uF	5%	50V
C251	1-136-169-00	FILM	0.22uF	5%	50V
C252	1-136-165-00	FILM	0.1uF	5%	50V
C253	1-136-161-00	FILM	0.047uF	5%	50V
C254	1-136-161-00	FILM	0.047uF	5%	50V
C255	1-136-165-00	FILM	0.1uF	5%	50V
C256	1-136-165-00	FILM	0.1uF	5%	50V
C257	1-136-157-00	FILM	0.022uF	5%	50V
C258	1-136-157-00	FILM	0.022uF	5%	50V
C259	1-136-165-00	FILM	0.1uF	5%	50V
C260	1-130-469-00	MYLAR	680PF	5%	50V
C261	1-136-153-00	FILM	0.01uF	5%	50V
C262	1-130-469-00	MYLAR	680PF	5%	50V
C263	1-136-153-00	FILM	0.01uF	5%	50V
C264	1-136-153-00	FILM	0.01uF	5%	50V
C265	1-136-153-00	FILM	0.01uF	5%	50V
C266	1-104-664-11	ELECT	47uF	20%	16V
C267	1-130-481-00	MYLAR	0.0068uF	5%	50V
C268	1-126-963-11	ELECT	4.7uF	20%	50V
C269	1-126-934-11	ELECT	220uF	20%	16V
C270	1-126-934-11	ELECT	220uF	20%	16V
C272	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C273	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C274	1-126-964-11	ELECT	10uF	20%	50V
C275	1-126-964-11	ELECT	10uF	20%	50V
C276	1-126-964-11	ELECT	10uF	20%	50V
C277	1-126-964-11	ELECT	10uF	20%	50V
C278	1-126-964-11	ELECT	10uF	20%	50V
C279	1-126-964-11	ELECT	10uF	20%	50V
C280	1-126-964-11	ELECT	10uF	20%	50V
C281	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C282	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C283	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C284	1-126-959-11	ELECT	0.47uF	20%	50V
C285	1-126-959-11	ELECT	0.47uF	20%	50V
C291	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C292	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C293	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C294	1-126-959-11	ELECT	0.47uF	20%	50V

Ref. No.	Part No.	Description			Remark
C301	1-126-960-11	ELECT	1uF	20%	50V
C302	1-130-479-00	MYLAR	0.0047uF	5%	50V
C303	1-136-165-00	FILM	0.1uF	5%	50V
C304	1-136-165-00	FILM	0.1uF	5%	50V
C305	1-126-964-11	ELECT	10uF	20%	50V
C306	1-126-960-11	ELECT	1uF	20%	50V
C307	1-126-959-11	ELECT	0.47uF	20%	50V
C308	1-126-964-11	ELECT	10uF	20%	50V
C309	1-137-194-81	FILM	0.47uF	5%	50V
C310	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C311	1-126-964-11	ELECT	10uF	20%	50V
C312	1-126-959-11	ELECT	0.47uF	20%	50V
C313	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C314	1-126-964-11	ELECT	10uF	20%	50V
C315	1-126-963-11	ELECT	4.7uF	20%	50V
C316	1-104-665-11	ELECT	100uF	20%	10V
C317	1-104-665-11	ELECT	100uF	20%	10V
C320	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C351	1-126-960-11	ELECT	1uF	20%	50V
C352	1-130-479-00	MYLAR	0.0047uF	5%	50V
C353	1-136-165-00	FILM	0.1uF	5%	50V
C354	1-136-165-00	FILM	0.1uF	5%	50V
C355	1-126-964-11	ELECT	10uF	20%	50V
C356	1-126-960-11	ELECT	1uF	20%	50V
C357	1-126-959-11	ELECT	0.47uF	20%	50V
C358	1-126-964-11	ELECT	10uF	20%	50V
C359	1-137-194-81	FILM	0.47uF	5%	50V
C373	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C374	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C401	1-126-961-11	ELECT	2.2uF	20%	50V
C403	1-107-721-11	ELECT	4.7uF	20%	100V
C411	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C412	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C413	1-126-916-11	ELECT	1000uF	20%	6.3V
C415	1-126-925-11	ELECT	470uF	20%	10V
C416	1-126-916-11	ELECT	1000uF	20%	6.3V
C421	1-107-717-11	ELECT	47uF	20%	50V
C423	1-104-665-11	ELECT	100uF	20%	10V
C431	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C432	1-126-963-11	ELECT	4.7uF	20%	50V
C451	1-126-961-11	ELECT	2.2uF	20%	50V
C453	1-107-721-11	ELECT	4.7uF	20%	100V
C501	1-126-964-11	ELECT	10uF	20%	50V
C502	1-136-165-00	FILM	0.1uF	5%	50V
C503	1-136-165-00	FILM	0.1uF	5%	50V
C504	1-126-926-11	ELECT	1000uF	20%	10V
C506	1-107-713-11	ELECT	4.7uF	20%	50V
C510	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C511	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C512	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C516	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C517	1-104-665-11	ELECT	100uF	20%	10V
C532	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C549	1-126-964-11	ELECT	10uF	20%	50V
C562	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C563	1-104-665-11	ELECT	100uF	20%	10V
C598	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V

Ref. No.	Part No.	Description			Remark
C599	1-104-665-11	ELECT	100uF	20%	10V
C901	1-136-165-00	FILM	0.1uF	5%	50V
C902	1-126-939-11	ELECT	10000uF	20%	16V
C903	1-126-934-11	ELECT	220uF	20%	16V
C904	1-126-924-11	ELECT	330uF	20%	10V
C905	1-104-664-11	ELECT	47uF	20%	16V
C906	1-136-165-00	FILM	0.1uF	5%	50V
C907	1-128-548-11	ELECT	4700uF	20%	25V
C908	1-126-964-11	ELECT	10uF	20%	50V
C909	1-126-916-11	ELECT	1000uF	20%	6.3V
C912	1-126-964-11	ELECT	10uF	20%	50V
C913	1-104-665-11	ELECT	100uF	20%	10V
C914	1-126-964-11	ELECT	10uF	20%	50V
C915	1-126-933-11	ELECT	100uF	20%	16V
C916	1-126-964-11	ELECT	10uF	20%	50V
C917	1-126-767-11	ELECT	1000uF	20%	16V
C918	1-104-664-11	ELECT	47uF	20%	16V
C919	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C920	1-126-933-11	ELECT	100uF	20%	16V
C921	1-126-964-11	ELECT	10uF	20%	50V
C922	1-126-916-11	ELECT	1000uF	20%	6.3V
C923	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C924	1-104-656-11	ELECT	2200uF	20%	6.3V
C925	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C926	1-126-916-11	ELECT	1000uF	20%	6.3V
C931	1-126-961-11	ELECT	2.2uF	20%	50V
C951	1-136-165-00	FILM	0.1uF	5%	50V
C952	1-126-768-11	ELECT	2200uF	20%	16V
C953	1-126-934-11	ELECT	220uF	20%	16V
C954	1-126-924-11	ELECT	330uF	20%	10V
C956	1-136-165-00	FILM	0.1uF	5%	50V

< CONNECTOR >

CN101	1-785-329-11	PIN, CONNECTOR (LIGHT ANGLE) 3P	
CN111	1-784-601-11	SOCKET, CONNECTOR (NON ZIF) 13P	(E,EA,MY,SP,IA)
CN112	1-785-334-11	PIN, CONNECTOR (LIGHT ANGLE) 8P	
CN113	1-785-335-11	PIN, CONNECTOR (LIGHT ANGLE) 9P	
* CN121	1-568-832-11	SOCKET, CONNECTOR 13P (TH)	
CN121	1-568-834-11	SOCKET, CONNECTOR 15P (E,EA,MY,SP,IA)	
CN131	1-568-834-11	SOCKET, CONNECTOR 15P	
* CN132	1-568-836-11	SOCKET, CONNECTOR 17P	
* CN141	1-568-839-11	SOCKET, CONNECTOR 23P	
CN151	1-770-726-11	CONNECTOR, BOARD TO BOARD 6P	
CN152	1-778-982-11	CONNECTOR, BOARD TO BOARD 13P	
* CN171	1-564-518-11	PLUG, CONNECTOR 3P	
* CN301	1-568-449-11	HOUSING, CONNECTOR(PC BOARD)3P	

< DIODE >

D141	8-719-988-61	DIODE	1SS355TE-17
D371	8-719-988-61	DIODE	1SS355TE-17
D372	8-719-988-61	DIODE	1SS355TE-17
D373	8-719-988-61	DIODE	1SS355TE-17
D374	8-719-988-61	DIODE	1SS355TE-17
D501	8-719-988-61	DIODE	1SS355TE-17
D502	8-719-988-61	DIODE	1SS355TE-17
D503	8-719-988-61	DIODE	1SS355TE-17
D504	8-719-988-61	DIODE	1SS355TE-17
D505	8-719-988-61	DIODE	1SS355TE-17
D506	8-719-988-61	DIODE	1SS355TE-17
D507	8-719-988-61	DIODE	1SS355TE-17
D508	8-719-988-61	DIODE	1SS355TE-17
D509	8-719-988-61	DIODE	1SS355TE-17
D510	8-719-988-61	DIODE	1SS355TE-17
D512	8-719-988-61	DIODE	1SS355TE-17
D901	8-719-073-81	DIODE	EC21QS06-TE12L
D902	8-719-073-81	DIODE	EC21QS06-TE12L
D903	8-719-073-81	DIODE	EC21QS06-TE12L
D904	8-719-073-81	DIODE	EC21QS06-TE12L
D905	8-719-988-61	DIODE	1SS355TE-17
D906	8-719-158-15	DIODE	RD5.6S-B
D907	8-719-988-61	DIODE	1SS355TE-17
D908	8-719-200-82	DIODE	11ES2
D909	8-719-200-82	DIODE	11ES2
D910	8-719-200-82	DIODE	11ES2
D911	8-719-200-82	DIODE	11ES2
D912	8-719-056-88	DIODE	UDZ-TE-17-11B
D913	8-719-200-82	DIODE	11ES2
D914	8-719-988-61	DIODE	1SS355TE-17
D915	8-719-210-33	DIODE	EC10DS2
D916	8-719-210-33	DIODE	EC10DS2
D918	8-719-210-33	DIODE	EC10DS2
D931	8-719-988-61	DIODE	1SS355TE-17
D932	8-719-988-61	DIODE	1SS355TE-17

< IC >

IC101	8-759-571-54	IC	M62493FP
IC201	8-759-571-51	IC	M62464FP
IC301	8-759-495-26	IC	HA12215
IC421	8-749-923-04	IC	TOTX178
IC501	8-759-588-91	IC	M30622MA-A09FP
IC502	8-759-635-63	IC	M51943BSL
IC901	8-759-231-53	IC	TA7805S
IC902	8-759-604-86	IC	M5F7807L
IC903	8-759-604-32	IC	M5F7810
IC904	8-759-701-79	IC	NJM7812FA
IC905	8-759-231-53	IC	TA7805S

< JACK >

J101	1-774-411-11	JACK, PIN 6P (VIDEO (AUDIO)/MD IN, OUT)
J102	1-779-599-11	JACK, PIN 6P (DVD INPUT)
J191	1-774-785-11	JACK, PIN 1P (WOOFER OUT)

< COIL >

L411	1-408-619-31	INDUCTOR	220uH
L421	1-410-482-31	INDUCTOR	100uH
L501	1-410-470-11	INDUCTOR	10uH

< TRANSISTOR >

Q111	8-729-900-36	TRANSISTOR	DTC124ES
Q112	8-729-119-78	TRANSISTOR	2SC403SP-51
Q113	8-729-119-78	TRANSISTOR	2SC403SP-51
Q114	8-729-141-30	TRANSISTOR	2SC3623A-LK
Q161	8-729-900-36	TRANSISTOR	DTC124ES

MAIN

Ref. No.	Part No.	Description	Remark
Q162	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q163	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q164	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q191	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q281	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q282	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q291	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q371	8-729-118-00	TRANSISTOR 2SB1116-L	
Q372	8-729-900-80	TRANSISTOR DTC114ES	
Q373	8-729-118-00	TRANSISTOR 2SB1116-L	
Q374	8-729-900-80	TRANSISTOR DTC114ES	
Q375	8-729-900-80	TRANSISTOR DTC114ES	
Q376	8-729-116-59	TRANSISTOR 2SB1068TP	
Q377	8-729-045-21	TRANSISTOR 2SD1513TP-LK	
Q378	8-729-422-57	TRANSISTOR UN4111	
Q379	8-729-900-80	TRANSISTOR DTC114ES	
Q380	8-729-116-59	TRANSISTOR 2SB1068TP	
Q381	8-729-045-21	TRANSISTOR 2SD1513TP-LK	
Q382	8-729-422-57	TRANSISTOR UN4111	
Q383	8-729-900-80	TRANSISTOR DTC114ES	
Q411	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q421	8-729-900-63	TRANSISTOR DTA124ES	
Q431	8-729-111-29	TRANSISTOR 2SD1616A-K	
Q432	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q461	8-729-141-30	TRANSISTOR 2SC3623A-LK	
Q501	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q502	8-729-900-63	TRANSISTOR DTA124ES	
Q503	8-729-900-63	TRANSISTOR DTA124ES	
Q901	8-729-209-15	TRANSISTOR 2SD2012	
Q902	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q903	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q904	8-729-900-36	TRANSISTOR DTC124ES	
Q905	8-729-900-36	TRANSISTOR DTC124ES	
Q906	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q907	8-729-900-36	TRANSISTOR DTC124ES	
Q908	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q909	8-729-900-36	TRANSISTOR DTC124ES	
Q910	8-729-026-68	TRANSISTOR 2SD2525(TP)	
Q913	8-729-040-20	TRANSISTOR RT1P137L-TP	
Q914	8-729-900-36	TRANSISTOR DTC124ES	
Q915	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q916	8-729-900-36	TRANSISTOR DTC124ES	
Q951	8-729-141-83	TRANSISTOR 2SB1094-LK	
Q952	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q953	8-729-119-76	TRANSISTOR 2SA1175-HFE	

< RESISTOR >

R101	1-216-049-91	RES,CHIP	1K	5%	1/10W
R102	1-216-049-91	RES,CHIP	1K	5%	1/10W
R103	1-216-049-91	RES,CHIP	1K	5%	1/10W
R111	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R112	1-216-073-00	METAL CHIP	10K	5%	1/10W
R113	1-216-295-91	SHORT	0		
R114	1-216-113-00	METAL CHIP	470K	5%	1/10W
R115	1-216-112-00	RES,CHIP	430K	5%	1/10W
R116	1-216-106-00	METAL CHIP	240K	5%	1/10W
R117	1-216-045-00	METAL CHIP	680	5%	1/10W
R118	1-216-081-00	METAL CHIP	22K	5%	1/10W
R119	1-216-105-91	RES,CHIP	220K	5%	1/10W
R120	1-216-073-00	METAL CHIP	10K	5%	1/10W
R121	1-216-089-91	RES,CHIP	47K	5%	1/10W
R122	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R123	1-216-097-91	RES,CHIP	100K	5%	1/10W
R124	1-216-073-00	METAL CHIP	10K	5%	1/10W
R125	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R126	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R128	1-216-121-91	RES,CHIP	1M	5%	1/10W
R131	1-216-025-91	RES,CHIP	100	5%	1/10W
R132	1-216-025-91	RES,CHIP	100	5%	1/10W
R133	1-216-025-91	RES,CHIP	100	5%	1/10W
R141	1-216-081-00	METAL CHIP	22K	5%	1/10W
R142	1-216-081-00	METAL CHIP	22K	5%	1/10W
R143	1-216-049-91	RES,CHIP	1K	5%	1/10W
R144	1-216-097-91	RES,CHIP	100K	5%	1/10W
R145	1-216-121-91	RES,CHIP	1M	5%	1/10W
R151	1-216-049-91	RES,CHIP	1K	5%	1/10W
R152	1-216-049-91	RES,CHIP	1K	5%	1/10W
R153	1-216-049-91	RES,CHIP	1K	5%	1/10W
R161	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R162	1-216-073-00	METAL CHIP	10K	5%	1/10W
R163	1-216-295-91	SHORT	0		
R164	1-216-113-00	METAL CHIP	470K	5%	1/10W
R165	1-216-112-00	RES,CHIP	430K	5%	1/10W
R166	1-216-106-00	METAL CHIP	240K	5%	1/10W
R167	1-216-045-00	METAL CHIP	680	5%	1/10W
R168	1-216-081-00	METAL CHIP	22K	5%	1/10W
R169	1-216-105-91	RES,CHIP	220K	5%	1/10W
R170	1-216-073-00	METAL CHIP	10K	5%	1/10W
R171	1-216-089-91	RES,CHIP	47K	5%	1/10W
R172	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R173	1-216-097-91	RES,CHIP	100K	5%	1/10W
R174	1-216-073-00	METAL CHIP	10K	5%	1/10W
R178	1-216-121-91	RES,CHIP	1M	5%	1/10W
R191	1-216-049-91	RES,CHIP	1K	5%	1/10W
R192	1-216-097-91	RES,CHIP	100K	5%	1/10W
R193	1-216-057-91	RES,CHIP	2.2K	5%	1/10W
R194	1-216-073-00	METAL CHIP	10K	5%	1/10W
R201	1-216-097-91	RES,CHIP	100K	5%	1/10W
R202	1-216-097-91	RES,CHIP	100K	5%	1/10W
R222	1-216-049-91	RES,CHIP	1K	5%	1/10W
R223	1-216-049-91	RES,CHIP	1K	5%	1/10W
R224	1-216-049-91	RES,CHIP	1K	5%	1/10W
R245	1-216-109-00	METAL CHIP	330K	5%	1/10W
R260	1-216-089-91	RES,CHIP	47K	5%	1/10W
R261	1-216-094-00	RES,CHIP	75K	5%	1/10W
R262	1-216-089-91	RES,CHIP	47K	5%	1/10W
R263	1-216-094-00	RES,CHIP	75K	5%	1/10W
R264	1-216-101-00	METAL CHIP	150K	5%	1/10W
R265	1-216-101-00	METAL CHIP	150K	5%	1/10W
R267	1-216-097-91	RES,CHIP	100K	5%	1/10W
R271	1-216-097-91	RES,CHIP	100K	5%	1/10W
R274	1-216-073-00	METAL CHIP	10K	5%	1/10W
R275	1-216-073-00	METAL CHIP	10K	5%	1/10W
R276	1-216-073-00	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R277	1-216-073-00	METAL CHIP	10K	5%	1/10W
R278	1-216-073-00	METAL CHIP	10K	5%	1/10W
R279	1-216-073-00	METAL CHIP	10K	5%	1/10W
R281	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R282	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R283	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R284	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R285	1-216-097-91	RES,CHIP	100K	5%	1/10W
R286	1-216-073-00	METAL CHIP	10K	5%	1/10W
R287	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R288	1-216-097-91	RES,CHIP	100K	5%	1/10W
R289	1-216-073-00	METAL CHIP	10K	5%	1/10W
R291	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R292	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R293	1-216-068-00	METAL CHIP	6.2K	5%	1/10W
R294	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R295	1-216-097-91	RES,CHIP	100K	5%	1/10W
R296	1-216-073-00	METAL CHIP	10K	5%	1/10W
R301	1-216-085-00	METAL CHIP	33K	5%	1/10W
R302	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R303	1-216-025-91	RES,CHIP	100	5%	1/10W
R304	1-216-025-91	RES,CHIP	100	5%	1/10W
R305	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R306	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R307	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R308	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R309	1-216-081-00	METAL CHIP	22K	5%	1/10W
R311	1-216-121-91	RES,CHIP	1M	5%	1/10W
R312	1-216-102-00	RES,CHIP	160K	5%	1/10W
R313	1-216-097-91	RES,CHIP	100K	5%	1/10W
R315	1-216-073-00	METAL CHIP	10K	5%	1/10W
R316	1-216-079-00	METAL CHIP	18K	5%	1/10W
R317	1-216-073-00	METAL CHIP	10K	5%	1/10W
R318	1-216-073-00	METAL CHIP	10K	5%	1/10W
R319	1-216-111-00	METAL CHIP	390K	5%	1/10W
R321	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R322	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R341	1-216-094-00	RES,CHIP	75K	5%	1/10W
R342	1-216-094-00	RES,CHIP	75K	5%	1/10W
R343	1-216-089-91	RES,CHIP	47K	5%	1/10W
R344	1-216-089-91	RES,CHIP	47K	5%	1/10W
R345	1-216-089-91	RES,CHIP	47K	5%	1/10W
R346	1-216-049-91	RES,CHIP	1K	5%	1/10W
R347	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R348	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R351	1-216-085-00	METAL CHIP	33K	5%	1/10W
R352	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R353	1-216-025-91	RES,CHIP	100	5%	1/10W
R354	1-216-025-91	RES,CHIP	100	5%	1/10W
R355	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R356	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R357	1-216-071-00	METAL CHIP	8.2K	5%	1/10W
R358	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R359	1-216-085-00	METAL CHIP	33K	5%	1/10W
R371	1-216-045-00	METAL CHIP	680	5%	1/10W
R372	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R373	1-216-045-00	METAL CHIP	680	5%	1/10W
R374	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R375	1-216-089-91	RES,CHIP	47K	5%	1/10W
R376	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R377	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R378	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R379	1-216-045-00	METAL CHIP	680	5%	1/10W
R380	1-216-045-00	METAL CHIP	680	5%	1/10W
R381	1-216-089-91	RES,CHIP	47K	5%	1/10W
R382	1-216-089-91	RES,CHIP	47K	5%	1/10W
R383	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R384	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R385	1-216-045-00	METAL CHIP	680	5%	1/10W
R386	1-216-045-00	METAL CHIP	680	5%	1/10W
R387	1-216-089-91	RES,CHIP	47K	5%	1/10W
R401	1-216-025-91	RES,CHIP	100	5%	1/10W
R402	1-216-085-00	METAL CHIP	33K	5%	1/10W
R411	1-240-578-31	CARBON	150	5%	1/2W
R412	1-240-578-31	CARBON	150	5%	1/2W
R413	1-240-577-31	CARBON	56	5%	1/2W
R414	1-216-049-91	RES,CHIP	1K	5%	1/10W
R415	1-216-073-00	METAL CHIP	10K	5%	1/10W
R416	1-216-089-91	RES,CHIP	47K	5%	1/10W
R417	1-216-049-91	RES,CHIP	1K	5%	1/10W
R418	1-216-089-91	RES,CHIP	47K	5%	1/10W
R419	1-216-089-91	RES,CHIP	47K	5%	1/10W
R421	1-216-085-00	METAL CHIP	33K	5%	1/10W
R431	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R432	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R433	1-216-097-91	RES,CHIP	100K	5%	1/10W
R451	1-216-025-91	RES,CHIP	100	5%	1/10W
R452	1-216-085-00	METAL CHIP	33K	5%	1/10W
R461	1-240-578-31	CARBON	150	5%	1/2W
R462	1-240-578-31	CARBON	150	5%	1/2W
R463	1-240-577-31	CARBON	56	5%	1/2W
R464	1-216-049-91	RES,CHIP	1K	5%	1/10W
R468	1-216-089-91	RES,CHIP	47K	5%	1/10W
R469	1-216-089-91	RES,CHIP	47K	5%	1/10W
R502	1-216-041-00	METAL CHIP	470	5%	1/10W
R503	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R504	1-216-025-91	RES,CHIP	100	5%	1/10W
R505	1-216-089-91	RES,CHIP	47K	5%	1/10W
R506	1-216-089-91	RES,CHIP	47K	5%	1/10W
R507	1-216-073-00	METAL CHIP	10K	5%	1/10W
R508	1-216-033-00	METAL CHIP	220	5%	1/10W
R509	1-216-097-91	RES,CHIP	100K	5%	1/10W
R510	1-216-295-91	SHORT	0		
R511	1-216-109-00	METAL CHIP	330K	5%	1/10W
R513	1-216-295-91	SHORT	0		
R517	1-216-073-00	METAL CHIP	10K	5%	1/10W
R518	1-216-025-91	RES,CHIP	100	5%	1/10W
R522	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R526	1-216-025-91	RES,CHIP	100	5%	1/10W
R527	1-216-025-91	RES,CHIP	100	5%	1/10W
R528	1-216-073-00	METAL CHIP	10K	5%	1/10W
R529	1-216-025-91	RES,CHIP	100	5%	1/10W
R530	1-216-025-91	RES,CHIP	100	5%	1/10W

MAIN | MOTOR (SLIDE) | MOTOR (TURN)

Ref. No.	Part No.	Description			Remark
R536	1-216-025-91	RES,CHIP	100	5%	1/10W
R538	1-216-073-00	METAL CHIP	10K	5%	1/10W
R539	1-216-025-91	RES,CHIP	100	5%	1/10W
R542	1-216-025-91	RES,CHIP	100	5%	1/10W
R543	1-216-025-91	RES,CHIP	100	5%	1/10W
R549	1-216-049-91	RES,CHIP	1K	5%	1/10W
R550	1-216-025-91	RES,CHIP	100	5%	1/10W
R551	1-216-025-91	RES,CHIP	100	5%	1/10W
R552	1-216-025-91	RES,CHIP	100	5%	1/10W
R553	1-216-025-91	RES,CHIP	100	5%	1/10W
R554	1-216-025-91	RES,CHIP	100	5%	1/10W
R555	1-216-025-91	RES,CHIP	100	5%	1/10W
R559	1-216-025-91	RES,CHIP	100	5%	1/10W
R560	1-216-025-91	RES,CHIP	100	5%	1/10W
R561	1-216-025-91	RES,CHIP	100	5%	1/10W
R563	1-216-025-91	RES,CHIP	100	5%	1/10W
R565	1-216-025-91	RES,CHIP	100	5%	1/10W
R566	1-216-025-91	RES,CHIP	100	5%	1/10W
R567	1-216-025-91	RES,CHIP	100	5%	1/10W
R568	1-216-025-91	RES,CHIP	100	5%	1/10W
R569	1-216-025-91	RES,CHIP	100	5%	1/10W
R570	1-216-025-91	RES,CHIP	100	5%	1/10W
R571	1-216-025-91	RES,CHIP	100	5%	1/10W
R572	1-216-073-00	METAL CHIP	10K	5%	1/10W
R573	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R574	1-216-073-00	METAL CHIP	10K	5%	1/10W
R575	1-216-073-00	METAL CHIP	10K	5%	1/10W
R576	1-216-073-00	METAL CHIP	10K	5%	1/10W
R577	1-216-073-00	METAL CHIP	10K	5%	1/10W
R578	1-216-073-00	METAL CHIP	10K	5%	1/10W
R586	1-216-025-91	RES,CHIP	100	5%	1/10W
R587	1-216-025-91	RES,CHIP	100	5%	1/10W
R588	1-216-025-91	RES,CHIP	100	5%	1/10W
R589	1-216-025-91	RES,CHIP	100	5%	1/10W
R590	1-216-025-91	RES,CHIP	100	5%	1/10W
R591	1-216-025-91	RES,CHIP	100	5%	1/10W
R594	1-216-295-91	SHORT	0		
R595	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R596	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R597	1-216-065-91	RES,CHIP	47K	5%	1/10W
R598	1-216-029-00	METAL CHIP	150	5%	1/10W (E,MY,SP,IA)
R598	1-216-037-00	METAL CHIP	330	5%	1/10W (TH)
R598	1-216-065-91	RES,CHIP	4.7K	5%	1/10W (EA)
R901	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R902	1-216-045-00	METAL CHIP	680	5%	1/10W
R903	1-216-138-00	METAL CHIP	3.3	5%	1/8W
R904	1-216-138-00	METAL CHIP	3.3	5%	1/8W
R905	1-216-053-00	METAL CHIP	1.5K	5%	1/10W
R906	1-216-043-91	RES,CHIP	560	5%	1/10W
R907	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R908	1-216-073-00	METAL CHIP	10K	5%	1/10W
R909	1-216-075-00	METAL CHIP	12K	5%	1/10W
R910	1-216-073-00	METAL CHIP	10K	5%	1/10W
R911	1-216-081-00	METAL CHIP	22K	5%	1/10W
R912	1-216-049-91	RES,CHIP	1K	5%	1/10W

Ref. No.	Part No.	Description			Remark
R913	1-216-033-00	METAL CHIP	220	5%	1/10W
R914	1-216-295-91	SHORT	0		
R915	1-216-081-00	METAL CHIP	22K	5%	1/10W
R916	1-216-049-91	RES,CHIP	1K	5%	1/10W
R917	1-216-295-91	RES,CHIP	0		(2012)
R931	1-216-081-00	METAL CHIP	22K	5%	1/10W
R932	1-216-081-00	METAL CHIP	22K	5%	1/10W
R933	1-216-081-00	METAL CHIP	22K	5%	1/10W
R951	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R952	1-216-045-00	METAL CHIP	680	5%	1/10W
R953	1-216-138-00	METAL CHIP	3.3	5%	1/8W
R954	1-216-138-00	METAL CHIP	3.3	5%	1/8W
		< VARIABLE RESISTOR >			
RV301	1-238-600-11	RES, ADJ, CARBON 10K			
RV351	1-238-600-11	RES, ADJ, CARBON 10K			
		< VIBRATOR >			
X510	1-567-098-41	VIBRATOR, CRYSTAL (32.768MHz)			
X513	1-781-107-21	VIBRATOR, SERAMIC (16MHz)			
**********					
*	1-658-578-11	MOTOR (SLIDE) BOARD			
		**********			
		< CAPACITOR >			
C801	1-162-306-11	CERAMIC	0.01uF	20%	16V
C804	1-162-306-11	CERAMIC	0.01uF	20%	16V
C805	1-126-964-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
* CN801	1-568-947-11	PIN, CONNECTOR 9P			
		< DIODE >			
D801	8-719-109-89	DIODE RD5.6ESB2			
D804	8-719-911-19	DIODE 1SS119			
D805	8-719-911-19	DIODE 1SS119			
		< IC >			
IC801	8-759-274-09	IC BA6286N			
		< RESISTOR >			
R801	1-249-401-11	CARBON	47	5%	1/4W F
		< SWITCH >			
S801	1-762-527-11	SWITCH, ROTARY (OPEN/CLOSE)			
**********					
*	1-658-577-11	MOTOR (TURN) BOARD			
		**********			
		< CAPACITOR >			
C701	1-162-306-11	CERAMIC	0.01uF	20%	16V
C702	1-126-964-11	ELECT	10uF	20%	50V
C705	1-162-306-11	CERAMIC	0.01uF	20%	16V

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN703	1-750-413-11	CONNECTOR, FFC/FPC 8P			
CN704	1-506-469-11	PIN, CONNECTOR 4P			
		< DIODE >			
D701	8-719-109-69	DIODE RD3.6ES-B2			
		< IC >			
IC701	8-759-633-65	IC M54641L			
		< RESISTOR >			
R706	1-249-411-11	CARBON	330	5%	1/4W
R707	1-249-401-11	CARBON	47	5%	1/4W F
**********					
	A-4417-959-A	PANEL BOARD, COMPLETE			
		**********			
	4-214-439-01	HOLDER, FL TUBE			
*	4-949-935-81	CUSHION (FL)			
		< CAPACITOR >			
C601	1-124-589-11	ELECT	47uF	20%	16V
C602	1-126-163-11	ELECT	4.7uF	20%	50V
C603	1-162-306-11	CERAMIC	0.01uF	20%	16V
C604	1-162-294-31	CERAMIC	0.001uF	10%	50V
C606	1-126-160-11	ELECT	1uF	20%	50V
C607	1-126-160-11	ELECT	1uF	20%	50V
C610	1-124-589-11	ELECT	47uF	20%	16V
C611	1-162-306-11	CERAMIC	0.01uF	20%	16V
C612	1-162-306-11	CERAMIC	0.01uF	20%	16V
C614	1-162-306-11	CERAMIC	0.01uF	20%	16V
C615	1-162-306-11	CERAMIC	0.01uF	20%	16V
C616	1-126-157-11	ELECT	10uF	20%	16V
C617	1-162-303-11	CERAMIC	0.0033uF	30%	16V
C618	1-126-157-11	ELECT	10uF	20%	16V
C619	1-126-157-11	ELECT	10uF	20%	16V
C620	1-126-163-11	ELECT	4.7uF	20%	50V
C625	1-126-157-11	ELECT	10uF	20%	16V
C627	1-162-306-11	CERAMIC	0.01uF	20%	16V
C628	1-126-157-11	ELECT	10uF	20%	16V
C630	1-162-306-11	CERAMIC	0.01uF	20%	16V
C631	1-162-306-11	CERAMIC	0.01uF	20%	16V
C632	1-162-306-11	CERAMIC	0.01uF	20%	16V
C651	1-162-282-31	CERAMIC	100PF	10%	50V
C652	1-162-282-31	CERAMIC	100PF	10%	50V
C653	1-162-282-31	CERAMIC	100PF	10%	50V
C654	1-162-282-31	CERAMIC	100PF	10%	50V
C655	1-162-282-31	CERAMIC	100PF	10%	50V
C656	1-162-282-31	CERAMIC	100PF	10%	50V
C657	1-162-282-31	CERAMIC	100PF	10%	50V
C658	1-162-282-31	CERAMIC	100PF	10%	50V
C659	1-162-282-31	CERAMIC	100PF	10%	50V
C660	1-162-282-31	CERAMIC	100PF	10%	50V
C661	1-162-282-31	CERAMIC	100PF	10%	50V
C662	1-162-282-31	CERAMIC	100PF	10%	50V

Ref. No.	Part No.	Description			Remark
C663	1-162-282-31	CERAMIC	100PF	10%	50V
C664	1-162-282-31	CERAMIC	100PF	10%	50V
C665	1-162-282-31	CERAMIC	100PF	10%	50V
C666	1-162-282-31	CERAMIC	100PF	10%	50V
C667	1-162-282-31	CERAMIC	100PF	10%	50V
C668	1-162-282-31	CERAMIC	100PF	10%	50V
C701	1-162-294-31	CERAMIC	0.001uF	10%	50V
C702	1-162-294-31	CERAMIC	0.001uF	10%	50V
C703	1-164-159-21	CERAMIC	0.1uF		50V
C711	1-162-294-31	CERAMIC	0.001uF	10%	50V
C712	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C713	1-126-160-11	ELECT	1uF	20%	50V
C714	1-136-495-11	FILM	0.068uF	5%	50V
C715	1-124-465-00	ELECT	0.47uF	20%	50V
C716	1-124-465-00	ELECT	0.47uF	20%	50V
C717	1-136-167-00	FILM	0.15uF	5%	50V
C718	1-162-294-31	CERAMIC	0.001uF	10%	50V
C719	1-126-160-11	ELECT	1uF	20%	50V
C720	1-161-494-00	CERAMIC	0.022uF		25V
C721	1-162-305-11	CERAMIC	0.0068uF	30%	16V
C722	1-136-495-11	FILM	0.068uF	5%	50V
C723	1-124-589-11	ELECT	47uF	20%	16V
C724	1-136-165-00	FILM	0.1uF	5%	50V
C725	1-124-589-11	ELECT	47uF	20%	16V
C731	1-162-306-11	CERAMIC	0.01uF	20%	16V
C732	1-124-257-00	ELECT	2.2uF	20%	50V
C733	1-162-294-31	CERAMIC	0.001uF	10%	50V
C734	1-162-215-31	CERAMIC	47PF	5%	50V
C735	1-124-261-00	ELECT	10uF	20%	50V
C736	1-162-290-31	CERAMIC	470PF	10%	50V
C737	1-124-463-00	ELECT	0.1uF	20%	50V
C738	1-124-257-00	ELECT	2.2uF	20%	50V
C739	1-162-215-31	CERAMIC	47PF	5%	50V
C741	1-124-261-00	ELECT	10uF	20%	50V
C742	1-162-282-31	CERAMIC	100PF	10%	50V
C743	1-124-257-00	ELECT	2.2uF	20%	50V
C744	1-162-306-11	CERAMIC	0.01uF	20%	16V
C745	1-124-257-00	ELECT	2.2uF	20%	50V
C747	1-164-159-21	CERAMIC	0.1uF		50V
		< CONNECTOR >			
CN601	1-784-745-11	CONNECTOR, FFC 23P			
		< DIODE >			
D610	8-719-050-84	DIODE RB441Q-40T-77			
D611	8-719-073-47	DIODE SML72923C-TP15 (REC/PAUSE START)			
D612	8-719-056-13	DIODE SML79423C-TP15 (►II CD)			
D613	8-719-058-03	DIODE SEL5423E-TP15 (TAPE B ►)			
D614	8-719-058-03	DIODE SEL5423E-TP15 (TAPE B ◄)			
D615	8-719-058-03	DIODE SEL5423E-TP15 (TAPE A ►)			
D616	8-719-058-03	DIODE SEL5423E-TP15 (TAPE A ◄)			
D617	8-719-057-97	DIODE SEL5923A-TP15 (PBC OFF)			
D618	8-719-057-97	DIODE SEL5923A-TP15 (PBC)			
D619	8-719-057-97	DIODE SEL5923A-TP15 (SYNC BASE L)			
D620	8-719-057-97	DIODE SEL5923A-TP15 (SYNC BASE H)			
D621	8-719-057-97	DIODE SEL5923A-TP15 (SYNC EQ)			

PANEL

Ref. No.	Part No.	Description	Remark
D622	8-719-063-93	DIODE SLR325VC-N-T32 (EFFECT)	
D623	8-719-057-97	DIODE SEL5923A-TP15 (VIDEO CD)	
D624	8-719-063-93	DIODE SLR325VC-N-T32 (NON STOP)	
D625	8-719-057-97	DIODE SEL5923A-TP15 (CIMEMA SPACE/DSP)	
D626	8-719-057-97	DIODE SEL5923A-TP15 (PRO LOGIC)	
D627	8-719-057-97	DIODE SEL5923A-TP15 (GROOVE)	
D628	8-719-063-93	DIODE SLR325VC-N-T32 (ENTERY NEXT)	
D629	8-719-063-93	DIODE SLR325VC-N-T32 (JOG ◀◀ ▬▬ ▶▶)	
D630	8-719-057-97	DIODE SEL5923A-TP15 (- ◀◀)	
D631	8-719-057-97	DIODE SEL5923A-TP15 (+ ▶▶)	
D632	8-719-063-93	DIODE SLR325VC-N-T32 (TIMER SELECT)	
D701	8-719-109-85	DIODE RD5.1ES-B2	
		< GROUND PLATE >	
* EP601	1-537-738-21	TERMINAL, EARTH	
		< FERRITE BEAD >	
FB601	1-412-473-21	INDUCTOR 0UH	
FB602	1-412-473-21	INDUCTOR 0UH	
		< FLUORESCENT INDICATOR >	
FL601	1-517-831-31	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC601	8-759-589-14	IC TMP88CS76F-6005	
IC602	8-749-011-05	IC GP1U28X (REMOCON CONTROL RECEIVER)	
IC603	8-759-083-77	IC BA3830F	
IC604	8-759-342-19	IC NJU3716M-T2	
IC711	8-759-496-40	IC M65850FP	
IC712	8-759-636-55	IC M5218AFP	
		< JACK >	
J701	1-785-569-11	JACK (SMALL TYPE)(PHONES)	
J711	1-785-569-11	JACK (SMALL TYPE)(MIC 2)	
J712	1-785-569-11	JACK (SMALL TYPE)(MIC 1)	
		< COIL >	
L601	1-410-509-11	INDUCTOR 10uH	
L602	1-410-517-11	INDUCTOR 47uH	
		< TRANSISTOR >	
Q601	8-729-118-00	TRANSISTOR 2SB1116-L	
Q602	8-729-118-00	TRANSISTOR 2SB1116-L	
Q603	8-729-119-78	TRANSISTOR 2SC403SP-51	
Q604	8-729-422-57	TRANSISTOR UN4111	
Q605	8-729-422-57	TRANSISTOR UN4111	
Q606	8-729-900-80	TRANSISTOR DTC114ES	
Q607	8-729-900-74	TRANSISTOR DTC143TS	
Q608	8-729-900-74	TRANSISTOR DTC143TS	
Q609	8-729-900-74	TRANSISTOR DTC143TS	
Q610	8-729-900-74	TRANSISTOR DTC143TS	
Q611	8-729-900-74	TRANSISTOR DTC143TS	
Q612	8-729-900-74	TRANSISTOR DTC143TS	
Q613	8-729-900-74	TRANSISTOR DTC143TS	

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R600	1-247-903-00	CARBON	1M	5%	1/4W
R601	1-247-807-31	CARBON	100	5%	1/4W
R602	1-249-429-11	CARBON	10K	5%	1/4W
R603	1-247-807-31	CARBON	100	5%	1/4W
R604	1-247-807-31	CARBON	100	5%	1/4W
R605	1-249-429-11	CARBON	10K	5%	1/4W
R606	1-249-401-11	CARBON	47	5%	1/4W F
R607	1-247-893-11	CARBON	390K	5%	1/4W
R608	1-247-893-11	CARBON	390K	5%	1/4W
R609	1-249-441-11	CARBON	100K	5%	1/4W
R610	1-249-429-11	CARBON	10K	5%	1/4W
R611	1-249-441-11	CARBON	100K	5%	1/4W
R612	1-249-401-11	CARBON	47	5%	1/4W F
R613	1-249-435-11	CARBON	33K	5%	1/4W
R614	1-247-895-91	CARBON	470K	5%	1/4W
R615	1-249-429-11	CARBON	10K	5%	1/4W
R616	1-249-441-11	CARBON	100K	5%	1/4W
R617	1-249-441-11	CARBON	100K	5%	1/4W
R618	1-249-441-11	CARBON	100K	5%	1/4W
R619	1-249-441-11	CARBON	100K	5%	1/4W
R620	1-249-441-11	CARBON	100K	5%	1/4W
R621	1-249-429-11	CARBON	10K	5%	1/4W
R622	1-249-410-11	CARBON	270	5%	1/4W F
R623	1-249-411-11	CARBON	330	5%	1/4W
R624	1-249-413-11	CARBON	470	5%	1/4W F
R625	1-249-414-11	CARBON	560	5%	1/4W F
R626	1-249-415-11	CARBON	680	5%	1/4W F
R627	1-249-417-11	CARBON	1K	5%	1/4W F
R628	1-249-418-11	CARBON	1.2K	5%	1/4W F
R629	1-249-420-11	CARBON	1.8K	5%	1/4W F
R630	1-249-422-11	CARBON	2.7K	5%	1/4W F
R631	1-247-843-11	CARBON	3.3K	5%	1/4W
R632	1-249-425-11	CARBON	4.7K	5%	1/4W F
R633	1-249-427-11	CARBON	6.8K	5%	1/4W F
R634	1-249-429-11	CARBON	10K	5%	1/4W
R635	1-249-431-11	CARBON	15K	5%	1/4W
R636	1-249-429-11	CARBON	10K	5%	1/4W
R637	1-249-410-11	CARBON	270	5%	1/4W F
R638	1-249-411-11	CARBON	330	5%	1/4W
R639	1-249-413-11	CARBON	470	5%	1/4W F
R640	1-249-414-11	CARBON	560	5%	1/4W F
R641	1-249-415-11	CARBON	680	5%	1/4W F
R642	1-249-417-11	CARBON	1K	5%	1/4W F
R643	1-249-418-11	CARBON	1.2K	5%	1/4W F
R644	1-249-420-11	CARBON	1.8K	5%	1/4W F
R645	1-249-422-11	CARBON	2.7K	5%	1/4W F
R646	1-247-843-11	CARBON	3.3K	5%	1/4W
R647	1-249-425-11	CARBON	4.7K	5%	1/4W F
R648	1-249-427-11	CARBON	6.8K	5%	1/4W F
R649	1-249-429-11	CARBON	10K	5%	1/4W
R650	1-249-429-11	CARBON	10K	5%	1/4W
R651	1-249-410-11	CARBON	270	5%	1/4W F
R652	1-249-411-11	CARBON	330	5%	1/4W
R653	1-249-413-11	CARBON	470	5%	1/4W F
R654	1-249-414-11	CARBON	560	5%	1/4W F

Ref. No.	Part No.	Description			Remark
R655	1-249-415-11	CARBON	680	5%	1/4W F
R656	1-249-429-11	CARBON	10K	5%	1/4W
R657	1-249-410-11	CARBON	270	5%	1/4W F
R658	1-249-411-11	CARBON	330	5%	1/4W
R659	1-249-413-11	CARBON	470	5%	1/4W F
R660	1-249-414-11	CARBON	560	5%	1/4W F
R661	1-249-415-11	CARBON	680	5%	1/4W F
R662	1-249-417-11	CARBON	1K	5%	1/4W F
R663	1-249-418-11	CARBON	1.2K	5%	1/4W F
R664	1-249-420-11	CARBON	1.8K	5%	1/4W F
R665	1-249-422-11	CARBON	2.7K	5%	1/4W F
R666	1-249-417-11	CARBON	1K	5%	1/4W F
R667	1-249-417-11	CARBON	1K	5%	1/4W F
R668	1-249-441-11	CARBON	100K	5%	1/4W
R669	1-249-441-11	CARBON	100K	5%	1/4W
R670	1-249-414-11	CARBON	560	5%	1/4W F
R671	1-249-437-11	CARBON	47K	5%	1/4W
R672	1-249-417-11	CARBON	1K	5%	1/4W F
R673	1-249-437-11	CARBON	47K	5%	1/4W
R674	1-249-417-11	CARBON	1K	5%	1/4W F
R675	1-249-437-11	CARBON	47K	5%	1/4W
R676	1-249-429-11	CARBON	10K	5%	1/4W
R678	1-249-407-11	CARBON	150	5%	1/4W F
R679	1-249-407-11	CARBON	150	5%	1/4W F
R680	1-247-804-11	CARBON	75	5%	1/4W
R681	1-249-407-11	CARBON	150	5%	1/4W F
R682	1-247-804-11	CARBON	75	5%	1/4W
R683	1-247-804-11	CARBON	75	5%	1/4W
R684	1-247-804-11	CARBON	75	5%	1/4W
R685	1-247-804-11	CARBON	75	5%	1/4W
R686	1-249-407-11	CARBON	150	5%	1/4W F
R687	1-249-407-11	CARBON	150	5%	1/4W F
R688	1-249-402-11	CARBON	56	5%	1/4W F
R689	1-249-402-11	CARBON	56	5%	1/4W F
R690	1-249-402-11	CARBON	56	5%	1/4W F
R691	1-249-407-11	CARBON	150	5%	1/4W F
R692	1-249-407-11	CARBON	150	5%	1/4W F
R693	1-249-407-11	CARBON	150	5%	1/4W F
R694	1-249-407-11	CARBON	150	5%	1/4W F
R695	1-249-402-11	CARBON	56	5%	1/4W F
R696	1-249-402-11	CARBON	56	5%	1/4W F
R697	1-249-407-11	CARBON	150	5%	1/4W F
R698	1-249-407-11	CARBON	150	5%	1/4W F
R699	1-247-807-31	CARBON	100	5%	1/4W
R700	1-247-807-31	CARBON	100	5%	1/4W
R701	1-249-429-11	CARBON	10K	5%	1/4W
R702	1-249-429-11	CARBON	10K	5%	1/4W
R703	1-249-429-11	CARBON	10K	5%	1/4W
R704	1-249-429-11	CARBON	10K	5%	1/4W
R705	1-249-429-11	CARBON	10K	5%	1/4W
R710	1-249-401-11	CARBON	47	5%	1/4W F
R711	1-247-863-91	CARBON	22K	5%	1/4W
R712	1-247-863-91	CARBON	22K	5%	1/4W
R713	1-247-863-91	CARBON	22K	5%	1/4W
R714	1-249-437-11	CARBON	47K	5%	1/4W
R715	1-247-863-91	CARBON	22K	5%	1/4W
R716	1-249-431-11	CARBON	15K	5%	1/4W
R717	1-247-863-91	CARBON	22K	5%	1/4W
R718	1-247-863-91	CARBON	22K	5%	1/4W
R719	1-247-881-00	CARBON	120K	5%	1/4W
R721	1-249-429-11	CARBON	10K	5%	1/4W
R722	1-249-417-11	CARBON	1K	5%	1/4W F
R723	1-249-441-11	CARBON	100K	5%	1/4W
R724	1-249-417-11	CARBON	1K	5%	1/4W F
R725	1-249-437-11	CARBON	47K	5%	1/4W
R726	1-249-429-11	CARBON	10K	5%	1/4W
R727	1-249-431-11	CARBON	15K	5%	1/4W
R728	1-247-885-00	CARBON	180K	5%	1/4W
R729	1-247-807-31	CARBON	100	5%	1/4W
R731	1-249-440-11	CARBON	82K	5%	1/4W
R732	1-249-437-11	CARBON	47K	5%	1/4W
R733	1-249-440-11	CARBON	82K	5%	1/4W
R734	1-249-417-11	CARBON	1K	5%	1/4W F
R735	1-249-420-11	CARBON	1.8K	5%	1/4W F
R741	1-249-421-11	CARBON	2.2K	5%	1/4W F
R742	1-249-421-11	CARBON	2.2K	5%	1/4W F
R743	1-247-807-31	CARBON	100K	5%	1/4W F
R768	1-249-417-11	CARBON	1K	5%	1/4W F
R769	1-249-429-11	CARBON	10K	5%	1/4W

< VARIABLE RESISTOR >

RV711	1-225-739-11	RES, VAR 50K (ECHO LEVEL)
RV712	1-225-739-11	RES, VAR 50K (MIC LEVEL)

< SWITCH >

S601	1-473-534-11	ENCODER, ROTARY (JOG ◀◀ ▬▬ ▶▶)
S602	1-473-392-11	ENCODER, ROTARY (VOLUME)
S611	1-762-875-21	SWITCH, KEYBOARD (SYNC BASS)
S612	1-762-875-21	SWITCH, KEYBOARD (SYNC EQ)
S613	1-762-875-21	SWITCH, KEYBOARD (KARAOKE PON/MPX)
S614	1-762-875-21	SWITCH, KEYBOARD (NON STOP)
S615	1-762-875-21	SWITCH, KEYBOARD (CIMEMA SPACE/DSP)
S616	1-762-875-21	SWITCH, KEYBOARD (DBFB)
S617	1-762-875-21	SWITCH, KEYBOARD (ENTERY/NEXT)
S618	1-762-875-21	SWITCH, KEYBOARD (+ ▶▶)
S619	1-762-875-21	SWITCH, KEYBOARD (- ◀◀)
S620	1-762-875-21	SWITCH, KEYBOARD (GROOVE)
S621	1-762-875-21	SWITCH, KEYBOARD (FLASH)
S622	1-762-875-21	SWITCH, KEYBOARD (REPEAT STEREO/MONO)
S623	1-762-875-21	SWITCH, KEYBOARD (PLAY MODE DOLBY NR)
S624	1-762-875-21	SWITCH, KEYBOARD (EDIT DIRECTION TUNER MEMORY)
S625	1-762-875-21	SWITCH, KEYBOARD (REC PAUSE/START)
S626	1-762-875-21	SWITCH, KEYBOARD (HI DUB)
S627	1-762-875-21	SWITCH, KEYBOARD (CD SYNC)
S628	1-762-875-21	SWITCH, KEYBOARD (LOOP)
S629	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)
S630	1-762-875-21	SWITCH, KEYBOARD (SPECTRUM ANALYZER)
S632	1-762-875-21	SWITCH, KEYBOARD (SELECT)
S633	1-762-875-21	SWITCH, KEYBOARD (RETURN)
S634	1-762-875-21	SWITCH, KEYBOARD (PREV)
S635	1-762-875-21	SWITCH, KEYBOARD (NEXT)
S636	1-762-875-21	SWITCH, KEYBOARD (DVD 5.1CH)
S637	1-762-875-21	SWITCH, KEYBOARD (PRO LOGIC)

Ref. No.	Part No.	Description	Remark
S638	1-762-875-21	SWITCH, KEYBOARD (TIMER SELECT)	
S639	1-762-875-21	SWITCH, KEYBOARD (P. FILE MEMORY)	
S640	1-762-875-21	SWITCH, KEYBOARD (GEQ CONTROL)	
S641	1-762-875-21	SWITCH, KEYBOARD (FILE SELECT)	
S642	1-762-875-21	SWITCH, KEYBOARD (EFFECT)	
S643	1-762-875-21	SWITCH, KEYBOARD (TUNER/BAND)	
S644	1-762-875-21	SWITCH, KEYBOARD (CD ►II)	
S645	1-762-875-21	SWITCH, KEYBOARD (■)	
S646	1-762-875-21	SWITCH, KEYBOARD (TAPE B ►)	
S647	1-762-875-21	SWITCH, KEYBOARD (TAPE B ◄)	
S648	1-762-875-21	SWITCH, KEYBOARD (TAPE A ►)	
S649	1-762-875-21	SWITCH, KEYBOARD (TAPE A ◄)	
S650	1-762-875-21	SWITCH, KEYBOARD (FUNCTION)	
S651	1-762-875-21	SWITCH, KEYBOARD (CLOCK TIMER SET)	
		< VIBRATOR >	
X601	1-781-312-11	VIBRATOR, CERAMIC (12.5MHz)	

****

*	1-658-576-11	SENSOR BOARD				
		**********				
		< IC >				
IC702	8-749-924-18	IC PHOTO INTERRUPTER RPI-1391				
IC703	8-749-924-30	IC PHOTO REFLECTOR GP2S28				
		< RESISTOR >				
R701	1-249-416-11	CARBON	820	5%	1/4W	F
R702	1-249-407-11	CARBON	150	5%	1/4W	F

****

*	1-672-369-11	TRANS BOARD			
		**********			
		< CAPACITOR >			
C971	1-128-563-11	ELECT	100uF	20%	100V
C972	1-126-960-11	ELECT	1uF	20%	50V
C973	1-126-948-11	ELECT	100uF	20%	35V
		< CONNECTOR >			
CN951	1-564-321-00	PIN, CONNECTOR 2P			
* CN952	1-564-527-11	PLUG, CONNECTOR 12P			
CN971	1-785-329-11	PIN, CONNECTOR (LIGHT ANGLE)3P			
		< DIODE >			
D971	8-719-200-82	DIODE 11ES2			
D972	8-719-936-43	DIODE HZS27-3LTD			
D973	8-719-109-63	DIODE RD3.0ESB2			
		< FUSE >			
⚠F951	1-532-504-31	FUSE (T4AL/250V)(E,EA,MY,SP,IA)			
⚠F951	1-532-505-31	FUSE (T5AL/250V)(TH)			
⚠F952	1-532-388-31	FUSE (T2AL/250V)(E,EA,MY,SP,IA)			
⚠F952	1-532-465-31	FUSE (T3.15AL/250V)(TH)			
⚠F953	1-532-464-31	FUSE (T2.5AL/250V)			

Ref. No.	Part No.	Description	Remark
⚠F961	1-532-504-31	FUSE (T4AL/250V)(E,EA,MY,SP,IA)	
⚠F961	1-533-949-31	FUSE, CYLINDRICAL (TIME LUG)(T8AL/250V)	(TH)
⚠F962	1-532-504-31	FUSE (T4AL/250V)(E,EA,MY,SP,IA)	
⚠F962	1-533-949-31	FUSE, CYLINDRICAL (TIME LUG)(T8AL/250V)	(TH)
		< FUSE HOLDER >	
FH901	1-533-217-31	HOLDER, FUSE	
FH902	1-533-217-31	HOLDER, FUSE	
FH903	1-533-217-31	HOLDER, FUSE	
FH911	1-533-217-31	HOLDER, FUSE	
FH912	1-533-217-31	HOLDER, FUSE	
FH951	1-533-217-31	HOLDER, FUSE	
FH952	1-533-217-31	HOLDER, FUSE	
FH953	1-533-217-31	HOLDER, FUSE	
FH961	1-533-217-31	HOLDER, FUSE	
FH962	1-533-217-31	HOLDER, FUSE	
		< TRANSISTOR >	
Q971	8-729-048-52	TRANSISTOR 2SA1932(TP)	
		< RESISTOR >	
⚠R951	1-219-119-81	FUSIBLE 0.1 5% 1/4W F	(E,EA,MY,SP,IA)
⚠R951	1-219-122-91	FUSIBLE 0.33 5% 1/4W F	(TH)
⚠R952	1-219-119-81	FUSIBLE 0.1 5% 1/4W F	(E,EA,MY,SP,IA)
⚠R952	1-219-122-91	FUSIBLE 0.33 5% 1/4W F	(TH)
⚠R953	1-219-119-81	FUSIBLE 0.1 5% 1/4W F	
R971	1-216-479-11	METAL OXIDE 560 5% 3W F	
R972	1-249-429-11	CARBON 10K 5% 1/4W	
R973	1-249-429-11	CARBON 10K 5% 1/4W	
R974	1-247-807-31	CARBON 100 5% 1/4W	
R975	1-247-807-31	CARBON 100 5% 1/4W	
		< SWITCH >	
⚠S951	1-771-291-11	SWITCH, POWER (VOLTAGE SELECTOR)	

****

	A-4724-729-A	VIDEO BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C102	1-163-143-00	CERAMIC CHIP	0.0012uF	5%	50V
C103	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C104	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C201	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C202	1-163-143-00	CERAMIC CHIP	0.0012uF	5%	50V
C203	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V
C301	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C302	1-163-127-00	CERAMIC CHIP	270PF	5%	50V
C303	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C304	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C305	1-163-263-11	CERAMIC CHIP	330PF	5%	50V

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
C306	1-163-263-11	CERAMIC CHIP	330PF	5%	50V
C310	1-163-137-00	CERAMIC CHIP	680PF	5%	50V
C311	1-216-295-91	SHORT	0		
C313	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C314	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C318	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C319	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C401	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C402	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C403	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C404	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C405	1-110-530-11	ELECT CHIP	1000uF	20%	6.3V
C406	1-110-530-11	ELECT CHIP	1000uF	20%	6.3V
C409	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C410	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C411	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C412	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C413	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C452	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C501	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C502	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C503	1-163-251-11	CERAMIC CHIP	100PF	5%	50V
C504	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C505	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C506	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C507	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C509	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C510	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C531	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C532	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C535	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C536	1-126-193-11	ELECT	1uF	20%	50V
C537	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C539	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C540	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C541	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C542	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C543	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C544	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C545	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C546	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C547	1-126-193-11	ELECT	1uF	20%	50V
C548	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C549	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C550	1-163-275-11	CERAMIC CHIP	0.001uF	5%	50V
C551	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C552	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C553	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C555	1-124-779-00	ELECT CHIP	10uF	20%	16V
C556	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C559	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C560	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C561	1-163-233-11	CERAMIC CHIP	18PF	5%	50V
C562	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C563	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C564	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C565	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C566	1-165-319-11	CERAMIC CHIP	0.1uF		50V
C568	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C569	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C570	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C571	1-128-065-11	ELECT CHIP	68MF	20%	10V
C573	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C574	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C576	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
C577	1-163-235-11	CERAMIC CHIP	22PF	5%	50V
		< CONNECTOR >			
CN501	1-770-706-11	CONNECTOR, FFC/FPC 23P			
CN503	1-779-416-11	CONNECTOR,FFC(LIF(NON-ZIF))13P			
		< TRIMMER >			
CT503	1-141-539-11	CAP, ADJ 10PF (VIDEO FREQUENCY)			
		< DIODE >			
D301	8-719-054-23	DIODE RB706D-40-T146			
D501	8-719-422-12	DIODE MA8039			
D502	8-719-018-51	DIODE CL-170R-CD (SELF-DIAGNOSIS)			
		< IC >			
IC101	8-759-701-39	IC NJM3404AM			
IC401	8-759-262-00	IC MC14576CF			
IC501	8-759-269-92	IC SN74HCU04ANS-E20			
IC502	8-759-587-67	IC M30620MC-A05FP			
IC504	8-759-269-92	IC SN74HCU04ANS-E20			
IC505	8-759-535-48	IC CL680T-D1			
IC506	8-759-573-23	IC LC372100PM-J48-TLA			
IC507	8-759-342-01	IC MB814260-70PJER			
IC509	8-759-535-62	IC PCM1727E-2/T2			
		< JACK >			
J301	1-537-943-11	TERMINAL, S (S VIDEO OUT)			
J302	1-774-227-11	JACK, PIN 1P (VIDEO OUT)			
		< JUMPER RESISTOR >			
JW101	1-216-295-91	SHORT	0		
JW201	1-216-295-91	SHORT	0		
JW401	1-216-295-91	SHORT	0		
JW402	1-216-295-91	SHORT	0		
JW403	1-216-295-91	SHORT	0		
JW404	1-216-295-91	SHORT	0		
JW405	1-216-295-91	SHORT	0		
JW413	1-216-295-91	SHORT	0		
JW421	1-216-295-91	SHORT	0		
JW422	1-216-295-91	SHORT	0		
JW502	1-216-295-91	SHORT	0		
JW503	1-216-295-91	SHORT	0		
JW504	1-216-295-91	SHORT	0		
JW505	1-216-295-91	SHORT	0		
		< COIL >			
L301	1-410-372-21	INDUCTOR CHIP	1.8uH		
L302	1-410-372-21	INDUCTOR CHIP	1.8uH		

VIDEO

Ref. No.	Part No.	Description			Remark
L501	1-216-296-91	SHORT	0		
L502	1-216-296-91	SHORT	0		
L503	1-216-296-91	SHORT	0		
L504	1-410-375-11	INDUCTOR CHIP	3.3uH		
L505	1-216-296-91	SHORT	0		
L506	1-216-296-91	SHORT	0		
L507	1-216-296-91	SHORT	0		
L508	1-216-296-91	SHORT	0		
L509	1-216-296-91	SHORT	0		
L510	1-216-296-91	SHORT	0		
		< TRANSISTOR >			
Q301	8-729-024-91	TRANSISTOR	2SC2712-GL-TE85L		
Q302	8-729-024-91	TRANSISTOR	2SC2712-GL-TE85L		
Q303	8-729-024-91	TRANSISTOR	2SC2712-GL-TE85L		
Q304	8-729-024-91	TRANSISTOR	2SC2712-GL-TE85L		
Q306	8-729-027-44	TRANSISTOR	DTC114TKA-T146		
Q307	8-729-024-91	TRANSISTOR	2SC2712-GL-TE85L		
Q308	8-729-024-91	TRANSISTOR	2SC2712-GL-TE85L		
Q310	8-729-024-91	TRANSISTOR	2SC2712-GL-TE85L		
Q453	8-729-920-72	TRANSISTOR	2SA1037K-T-146-QR		
Q454	8-729-920-72	TRANSISTOR	2SA1037K-T-146-QR		
Q502	8-729-024-91	TRANSISTOR	2SC2712-GL-TE85L		
Q531	8-729-140-75	TRANSISTOR	2SD999-CLCK		
		< RESISTOR >			
R101	1-216-073-00	METAL CHIP	10K	5%	1/10W
R102	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R103	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R105	1-216-295-91	SHORT	0		
R201	1-216-073-00	METAL CHIP	10K	5%	1/10W
R202	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R203	1-208-441-61	RES,CHIP	1.5K	2%	1/10W
R205	1-216-295-91	SHORT	0		
R301	1-216-624-11	METAL CHIP	75	0.5%	1/10W
R302	1-216-624-11	METAL CHIP	75	0.5%	1/10W
R305	1-216-049-91	RES,CHIP	1K	5%	1/10W
R306	1-216-073-00	METAL CHIP	10K	5%	1/10W
R307	1-216-049-91	RES,CHIP	1K	5%	1/10W
R308	1-216-049-91	RES,CHIP	1K	5%	1/10W
R309	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R312	1-216-073-00	METAL CHIP	10K	5%	1/10W
R313	1-216-049-91	RES,CHIP	1K	5%	1/10W
R314	1-216-049-91	RES,CHIP	1K	5%	1/10W
R315	1-216-047-91	RES,CHIP	820	5%	1/10W
R316	1-216-657-11	METAL CHIP	1.8K	0.5%	1/10W
R317	1-216-683-11	METAL CHIP	22K	0.5%	1/10W
R318	1-216-033-00	METAL CHIP	220	5%	1/10W
R319	1-216-049-91	RES,CHIP	1K	5%	1/10W
R320	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R321	1-216-049-91	RES,CHIP	1K	5%	1/10W
R324	1-216-022-00	METAL CHIP	75	5%	1/10W
R325	1-216-295-91	SHORT	0		
R327	1-216-049-91	RES,CHIP	1K	5%	1/10W
R328	1-216-655-11	METAL CHIP	1.5K	0.5%	1/10W
R329	1-216-649-11	METAL CHIP	820	0.5%	1/10W

Ref. No.	Part No.	Description			Remark
R332	1-216-651-11	METAL CHIP	1K	0.5%	1/10W
R333	1-216-046-00	METAL CHIP	750	5%	1/10W
R335	1-216-073-00	METAL CHIP	10K	5%	1/10W
R336	1-216-073-00	METAL CHIP	10K	5%	1/10W
R340	1-216-022-00	METAL CHIP	75	5%	1/10W
R341	1-216-121-91	RES,CHIP	1M	5%	1/10W
R342	1-216-022-00	METAL CHIP	75	5%	1/10W
R403	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R404	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R405	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R406	1-216-081-00	METAL CHIP	22K	5%	1/10W
R407	1-216-073-00	METAL CHIP	10K	5%	1/10W
R408	1-216-073-00	METAL CHIP	10K	5%	1/10W
R409	1-216-049-91	RES,CHIP	1K	5%	1/10W
R410	1-216-049-91	RES,CHIP	1K	5%	1/10W
R411	1-216-073-00	METAL CHIP	10K	5%	1/10W
R412	1-216-073-00	METAL CHIP	10K	5%	1/10W
R414	1-216-081-00	METAL CHIP	22K	5%	1/10W
R415	1-216-081-00	METAL CHIP	22K	5%	1/10W
R423	1-216-073-00	METAL CHIP	10K	5%	1/10W
R424	1-216-073-00	METAL CHIP	10K	5%	1/10W
R425	1-216-073-00	METAL CHIP	10K	5%	1/10W
R426	1-216-073-00	METAL CHIP	10K	5%	1/10W
R457	1-216-025-91	RES,CHIP	100	5%	1/10W
R458	1-216-025-91	RES,CHIP	100	5%	1/10W
R459	1-216-025-91	RES,CHIP	100	5%	1/10W
R461	1-216-025-91	RES,CHIP	100	5%	1/10W
R462	1-216-025-91	RES,CHIP	100	5%	1/10W
R463	1-216-025-91	RES,CHIP	100	5%	1/10W
R464	1-216-025-91	RES,CHIP	100	5%	1/10W
R501	1-216-025-91	RES,CHIP	100	5%	1/10W
R502	1-216-025-91	RES,CHIP	100	5%	1/10W
R503	1-216-025-91	RES,CHIP	100	5%	1/10W
R504	1-216-025-91	RES,CHIP	100	5%	1/10W
R505	1-216-025-91	RES,CHIP	100	5%	1/10W
R506	1-216-025-91	RES,CHIP	100	5%	1/10W
R507	1-216-073-00	METAL CHIP	10K	5%	1/10W
R508	1-216-081-00	METAL CHIP	22K	5%	1/10W
R509	1-216-081-00	METAL CHIP	22K	5%	1/10W
R510	1-216-081-00	METAL CHIP	22K	5%	1/10W
R511	1-216-081-00	METAL CHIP	22K	5%	1/10W
R512	1-216-081-00	METAL CHIP	22K	5%	1/10W
R513	1-216-081-00	METAL CHIP	22K	5%	1/10W
R514	1-216-081-00	METAL CHIP	22K	5%	1/10W
R516	1-216-073-00	METAL CHIP	10K	5%	1/10W
R517	1-216-073-00	METAL CHIP	10K	5%	1/10W
R518	1-216-073-00	METAL CHIP	10K	5%	1/10W
R519	1-216-025-91	RES,CHIP	100	5%	1/10W
R520	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R523	1-216-013-00	METAL CHIP	33	5%	1/10W
R530	1-216-081-00	METAL CHIP	22K	5%	1/10W
R531	1-216-025-91	RES,CHIP	100	5%	1/10W
R532	1-216-025-91	RES,CHIP	100	5%	1/10W
R533	1-216-025-91	RES,CHIP	100	5%	1/10W
R534	1-216-073-00	METAL CHIP	10K	5%	1/10W
R535	1-216-073-00	METAL CHIP	10K	5%	1/10W
R536	1-216-033-00	METAL CHIP	220	5%	1/10W

Ref. No.	Part No.	Description			Remark
R537	1-216-025-91	RES,CHIP	100	5%	1/10W
R538	1-216-073-00	METAL CHIP	10K	5%	1/10W
R542	1-216-049-91	RES,CHIP	1K	5%	1/10W
R543	1-216-685-11	METAL CHIP	27K	0.5%	1/10W
R544	1-216-659-11	METAL CHIP	2.2K	0.5%	1/10W
R545	1-216-025-91	RES,CHIP	100	5%	1/10W
R546	1-216-049-91	RES,CHIP	1K	5%	1/10W
R547	1-216-295-91	SHORT	0		
R548	1-216-049-91	RES,CHIP	1K	5%	1/10W
R549	1-216-025-91	RES,CHIP	100	5%	1/10W
R550	1-216-025-91	RES,CHIP	100	5%	1/10W
R551	1-216-025-91	RES,CHIP	100	5%	1/10W
R552	1-216-025-91	RES,CHIP	100	5%	1/10W
R554	1-216-025-91	RES,CHIP	100	5%	1/10W
R555	1-216-121-91	RES,CHIP	1M	5%	1/10W
R556	1-216-025-91	RES,CHIP	100	5%	1/10W
R557	1-216-025-91	RES,CHIP	100	5%	1/10W
R558	1-216-073-00	METAL CHIP	10K	5%	1/10W
R559	1-216-073-00	METAL CHIP	10K	5%	1/10W
R560	1-216-051-00	METAL CHIP	1.2K	5%	1/10W
R561	1-216-049-91	RES,CHIP	1K	5%	1/10W
R562	1-216-025-91	RES,CHIP	100	5%	1/10W
R563	1-216-025-91	RES,CHIP	100	5%	1/10W
R564	1-216-025-91	RES,CHIP	100	5%	1/10W
R565	1-216-025-91	RES,CHIP	100	5%	1/10W
R566	1-216-025-91	RES,CHIP	100	5%	1/10W
R567	1-216-073-00	METAL CHIP	10K	5%	1/10W
R568	1-216-073-00	METAL CHIP	10K	5%	1/10W
R569	1-216-073-00	METAL CHIP	10K	5%	1/10W
R572	1-216-073-00	METAL CHIP	10K	5%	1/10W
R573	1-216-073-00	METAL CHIP	10K	5%	1/10W
R574	1-216-073-00	METAL CHIP	10K	5%	1/10W
R577	1-216-081-00	METAL CHIP	22K	5%	1/10W
R578	1-216-081-00	METAL CHIP	22K	5%	1/10W
R579	1-216-073-00	METAL CHIP	10K	5%	1/10W
R580	1-216-073-00	METAL CHIP	10K	5%	1/10W
		< SWITCH >			
S501	1-571-395-11	SWITCH, SLIDE (SYSTEM SELECT NTSC→AUTO→PAL)			
		< VIBRATOR >			
X501	1-767-510-11	VIBRATOR, CERAMIC (10MHz)			
X503	1-767-519-11	VIBRATOR, CRYSTAL (27MHz)			

****

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
5	1-233-545-11	TUNER UNIT (FM/AM) (TH)	
5	1-233-546-11	TUNER UNIT (FM/MW/SW) (EXCEPT TH)	
9	1-783-949-11	WIRE (FLAT TYPE) (13 CORE)	
10	1-775-212-11	WIRE (FLAT TYPE) (23 CORE)	
54	1-783-570-11	WIRE (FLAT TYPE) (19 CORE)	
55	1-769-976-11	WIRE (FLAT TYPE) (13 CORE) (TH)	
55	1-773-008-11	WIRE (FLAT TYPE) (15 CORE) (140 mm)	(EXCEPT TH)
56	1-773-049-11	WIRE (FLAT TYPE) (17 CORE)	
58	1-569-007-11	ADAPTOR, CONVERSION 2P (E,IA)	
58	1-569-008-21	ADAPTOR, CONVERSION 2P (EA,SP,MY)	
⚠59	1-575-651-11	CORD, POWER (EA,SP,MY)	
⚠59	1-575-653-11	CORD, POWER (E,IA,TH)	
62	1-773-023-11	WIRE (FLAT TYPE) (15 CORE) (310 mm)	
116	1-773-189-11	WIRE (FLAT TYPE) (23 CORE)	
121	1-674-232-11	PUSH CATCH STOP BOARD	
257	1-452-925-21	MAGNET ASSY	
258	1-776-042-11	WIRE (FLAT TYPE) (8 CORE)	
⚠301	8-820-020-02	OPTICAL PICK-UP KSS-213D/Q-NP	
302	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
FL601	1-517-831-31	INDICATOR TUBE, FLUORESCENT	
HP101	A-2056-681-B	DECK (A) ASSY, HEAD (230AWR2)	
HP101	A-2056-683-B	DECK (A) ASSY, HEAD (230PWR2)	
HRPE101	A-2056-682-B	DECK (B) ASSY, HEAD (230AWR2)	
HRPE101	A-2056-684-B	DECK (B) ASSY, HEAD (230PWR2)	
M1	A-2004-628-A	MOTOR ASSY, CAPSTAN	
M101	X-4917-523-3	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	
M701	A-4672-004-A	MOTOR ASSY (TURN)	
M801	A-4672-004-A	MOTOR ASSY (SLIDE)	
M901	1-763-072-11	FAN, DC	
S811	1-473-335-11	ENCODER, ROTARY	
⚠T951	1-433-555-11	TRANSFORMER, POWER	

****

		**********
		HARDWARE LIST
		**********
#1	7-685-871-01	SCREW +BVTT 3X6 (S)
#2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
#3	7-685-880-09	SCREW +BVTT 4X6 (S)
#4	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3
#5	7-685-852-04	SCREW +BVTT 2X5 (S)
#6	7-621-775-10	SCREW +B 2.6X4
#7	7-682-553-04	SCREW +P 3X20
#8	7-685-851-04	SCREW +BVTT 2X4 (S)
#9	7-628-254-15	SCREW +PS 2.6X6
#10	7-628-254-50	SCREW +PS 2.6X16
#11	7-685-861-01	SCREW +BVTT 2.6X5 (S)
#12	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

9-928-914-11

Sony Corporation
Home Audio Company

99E0923-1D
Printed in Japan © 1999. 5
Published by Quality Assurance Dept.